

**1FEDERAL RAILROAD ADMINISTRATION**  
**Inspection Brake System Safety Standards for Freight and**  
**Other Non-Passenger Trains and Equipment (Power Brakes)**  
**(49 CFR Part 232)**  
**SUPPORTING JUSTIFICATION**  
**RIN 2130-AC67; OMB No. 2130-0008**

Summary

- This submission is a revision to the last approved submission pertaining to Part 232 that was approved by OMB on January 29, 2019 and which expires January 31, 2022.
- FRA is publishing a Final Rule revising Part 232 titled Miscellaneous Amendments to Brake System Safety Standards and Codification of Waivers in the Federal Register on December 11, 2020. See 85 FR 80544.
- The total number of burden hours requested for this submission is 333,682 hours.
- The total burden previously approved for this information collection amounted to 1,080,245 hours.
- Total number of responses requested for this submission is 5,345,581.
- Total number of responses previously approved for this collection is 30,525,348.
- The change in burden from the last approved submission decreased the burden by 746,563 hours and by 25,179,767 responses.
- Total program changes decreased the burden by 14,851 hours and 1,246,109 responses.
- The adjustments decreased the burden by 731,712 hours and 23,933,658 responses.
- The answer to question number 12 itemizes information collection requirements.
- The tables in answer to question number 15 itemize adjustments.

**1. Circumstances that make collection of the information necessary.**

**Background**

In December 2017, AAR filed a petition for waiver from the rule that requires a Class I brake test prior to operation if a train is off-air for a period of more than four hours, contending it is too restrictive. See Docket No. FRA-2017-0130. The Safety Board denied the waiver petition, finding that the relief requested was more appropriately addressed through the rulemaking process and that there was a lack of supporting data

submitted with the waiver request. Subsequently, in a letter dated July 12, 2018— included in the public docket to this rulemaking proceeding—AAR submitted a revised petition for rulemaking including substantially more supporting data than the waiver request it submitted in December 2017.

This rulemaking responds to AAR's petition, codifies of existing waivers related to brake systems, and makes technical amendments to reduce regulatory burdens while maintaining or improving safety. This rulemaking is a direct result of FRA's effort to periodically review its regulations and propose amendments to the regulations to streamline and update them to reflect technological advances and lessons learned through feedback from all stakeholders.

FRA regulations require the air brake systems of trains, and the air brakes of individual freight cars, to be inspected and tested in certain circumstances. The regulations provide for five primary types of brake system inspections: Class I (initial terminal inspection), Class IA (1,000-mile inspection), Class II (intermediate inspection), Class III (trainline continuity inspection), and an SCT.

A Class I air brake test, also referred to as an initial terminal inspection, is a comprehensive inspection of the brake equipment on each car in an assembled train and is required to be performed at the location where a train is originally assembled, when the consist is changed in certain ways (by adding or removing cars), and when a train is off-air for more than four hours. Class I brake tests are intended to ensure that a train is in proper working condition and capable of traveling to its destination with minimal problems en route. A Class I brake test requires the performance of a leakage test and in-depth inspection of the brake equipment (on both sides of the freight car) to ensure that each car's brake system is properly secure, does not bind or foul, and applies and releases in response to a specified brake pipe pressure signal. Piston travel must also be inspected and adjusted to a specified length if found not to be within a certain range of movement.

A Class IA brake test is required every 1,000 miles. Although it is less detailed than a Class I inspection, a Class IA brake test includes all the same elements of a Class I test, but with less stringent piston travel requirements. The most restrictive car or block of cars in a train determines the location where Class IA tests must be performed.

Class II brake tests, also referred to as intermediate inspections, are less detailed inspections used for cars that do not have a compliant Class I inspection record that are picked up by a train. The test includes a test for excessive brake pipe leakage, charging the air brakes to within 15 psi of working pressure, making a 20-psi reduction in the brake pipe to actuate the brake, restoration of pressure to working psi, and confirmation that all brakes release and full brake pipe pressure has been restored to the rear of the train. Cars that receive a Class II brake test are required to receive a full Class I brake test at the next forward location where it can be performed.

A Class III brake test, also known as a trainline continuity inspection, must be performed any time the brake pipe is opened on an operating train. The test includes charging the air brakes to working pressure (no less than 60 psi at rear of train), making a 20-psi reduction in the brake pipe to actuate the brake on the rear car of the train, releasing the brake, and ensuring that pressure at the rear of the train is restored.

In addition to the types of air brake tests noted above, the regulations require the brakes of individual cars to be periodically maintained and tested in certain circumstances. This test is known as an SCT and is used to validate individual air brake effectiveness. An SCT is required: at least every 8 years for new or rebuilt freight cars, at least every 5 years for all other freight cars, and any time a freight car is on a shop or repair track, if the car has not had a SCT in the previous 12 months.

FRA has identified various waivers that warrant consideration for regulatory codification. In particular, FRA is incorporating into regulations waivers providing conditional exceptions to rules concerning air brake testing, end-of-train (EOT) devices, and helper service. FRA is also extending the time that freight rail equipment can be “off-air” before requiring a new brake inspection, making various modifications to the existing brake related regulations for clarity, and removing outdated or unnecessary provisions.

The regulatory revisions recognize the use of newer procedures or technologies that have been proven by test waivers to maintain or increase safety. In addition, under the conditions of a waiver, when a waiver is renewed, the railroad or manufacturer who applied for the waiver renewal is required to report any related accidents/incidents to FRA. Furthermore, FRA regional offices conduct investigations of any reported accidents/incidents. FRA’s renewal of a waiver indicates the operations under a waiver have a safe track record.

Railroads are doing more work (i.e., applying for waivers) than necessary. It would be inefficient to require each party to request, and for FRA to continually renew, these waivers. By formally codifying the relief into regulation, FRA would save the railroads and itself from those burdens. Other railroads would also be relieved from applying for the same waivers. Moreover, once a waiver is codified, railroads may focus on compliance with an accepted standard rather than on the time and resources necessary to interpret the regulation and develop a waiver petition.

Several of the provisions in the final rule will reduce the paperwork burden on industry. For the 26-C and D-22 type brake valves, FRA is extending the time before these types of valves need to be inspected and cleaned, resulting in fewer tests. FRA is also extending the time before a Class I brake test must be conducted on rail equipment that is not connected to a source of compressed air prior to being operated in a train again, from 4 hours to 24 hours. This final rule will extend the time between single car air brake tests from 12 to 24 months for automated tests, and to 48 months for automated tests using a four-pressure receiver. In general, this final rule will reduce the number of brake tests, which will in turn reduce the paperwork burden.

For a substantial summary, history, and analysis of the regulations affecting Class I, Class IA, Class II, and Class III brake tests, single car air brake tests, and the operation and testing of end-of-train devices, please visit the following *Federal Register* publications: 66 FR 4104, Jan. 17, 2001; 66 FR 39683, Aug. 1, 2001; and 67 FR 17555, Apr. 10, 2002.

**2. How, by whom, and for what purpose the information is to be used.**

This information collection request is a revision to the last approved submission. FRA is revising its regulations governing brake inspections, tests, and equipment. The changes include the incorporation of relief from various provisions provided in long-standing waivers related to single car air brake tests, end-of train devices, helper service, and brake maintenance. In addition, FRA is making various modifications to the existing brake related regulations for clarity and to remove outdated or unnecessary provisions.

FRA is revising § 232.205(c)(ii)(B) to allow the use of a combined 90 CFM air flow limit on DP and APU-equipped trains, provided railroads implement operating rules to ensure compliant operation of a train if air flow exceeds these parameters after the Class I brake test is completed. The combined air flow is derived by the sum of the air flow from all air sources in the train. The revision under § 232.205 will require railroads to develop and implement operating rules to ensure compliant operation of a train if air flow exceeds these parameters after the Class I brake test is completed.

The revision under § 232.213 will require railroads to provide a written designation to FRA of extended haul trains. The submission must also include the location of every expected brake and mechanical inspection, not only the Class I inspections performed by a qualified mechanical inspector, on the designated train.

The revision under § 232.409 includes requirements for inspection and testing of end-of-train (EOT) devices. While the existing § 232.409 includes EOT device inspection and testing requirements, including testing of “radio frequencies and modulation of the device,” it does not include calibration requirements for EOT device air pressure sensors (i.e., air gauges or transducers in lieu of gauges). FRA is adding new paragraph (e) to address this apparent omission. FRA is clarifying the EOT device air pressure sensor needs to be tested annually. As this section clarifies an existing regulatory requirement, FRA is not accounting for these costs in the overall analysis for this rulemaking, but acknowledges railroads may incur a burden to calibrate the air pressure sensor on the EOT device.

On August 6, 2015, FRA amended Part 232 for freight and other non-passenger trains and equipment to strengthen the requirements relating to the securement of unattended equipment. Specifically, FRA added § 232.103 (n)(6)-(n)(11) and section 232.105(h)(1)-(h)(4). FRA uses the information collected under § 232.103(n)(7) to ensure that railroads adopt and comply with a plan identifying specific locations or circumstances when equipment may be left unattended. Railroads are required to notify FRA when they have developed their plans and have them in place, or modify an existing plan, prior to

operating pursuant to that plan. FRA reviews these plans to determine that they contain sufficient safety justification for leaving such equipment unattended in the identified location or under the specified circumstances. Plans deemed to have insufficient safety justification are disapproved, and need to be modified before approval by FRA.

Under § 232.103(n)(8), railroads employees must verify with another qualified employee of securement where a freight train or standing freight car or cars described in paragraph (n)(6) is left unattended on a main track or siding outside of a yard, and not directly adjacent to a yard. This requirement is similar to Emergency Order 28, which currently requires employees to verify proper securement with a qualified railroad employee. This may be done by relaying pertinent securement information (i.e., the number of hand brakes applied, the tonnage and length of the train or vehicle, the grade and terrain features of the track, any relevant weather conditions, and the type of equipment being secured) to the qualified railroad employee. The qualified railroad employee must then verify and confirm with the train crew that the securement meets the railroad's requirements. This verification and confirmation requirement amounts to a job briefing that is spelled out in paragraph (n)(9) and is essential for both the safety of railroad employees and the general public. Paragraph (n)(8)(ii) requires that the controlling locomotive cab be locked on locomotives capable of being locked or the reverser on the controlling locomotive be removed from the control stand and placed in a secure location. Each railroad may opt to either lock the locomotive or remove its reverser. Railroads are also free to require both the locking of the locomotive and the removal of the reverser. This requirement is intended to provide flexibility for railroads, further protection to the locomotive, and prevent unauthorized access to the locomotive cab.

FRA has codified the job briefing requirement in Emergency Order 28 into regulation under § 232.103 (n)(9). This section requires each railroad to implement operating rules and practices requiring the discussion of securement among crew members and other involved railroad employees before engaging in any job that will impact or require the securement of any equipment in the course of the work being performed. This requirement is analogous to other Federal regulations that require crew members to have a job briefing before performing various tasks, such as confirming the position of a main track switch before leaving an area.

The information exchanged in the job briefing will be used by railroad employees to make certain that all crew members and other involved railroad employees are aware of what is necessary to properly secure the equipment in compliance with § 232.103(n). FRA expects that the train crew will discuss the equipment that is impacted, the responsibilities of each employee involved in the securement of a train or vehicle, the number of hand brakes that will be required to secure the affected equipment, the process for ensuring that securement is sufficient, how the verification will be determined, and any other relevant factors affecting securement of unattended equipment.

FRA reviews railroad operating rules and practices to ensure that they require job briefings of securement for any activity that will impact or require the securement of any unattended equipment in the course of work being formed. Having such a requirement in

in their operating rules and practices highlights the importance railroads place on it and facilitates incorporation by railroad employees' into their daily routine. From a safety perspective, it is imperative that railroads workers (train crew members and others) conduct the required job briefings so there is no confusion concerning the securement of unattended locomotives and trains.

Under paragraph (n)(10), FRA requires railroads to develop procedures to ensure that a qualified railroad employee inspects all equipment that any emergency responder has been on, under, or between for proper securement before the rail equipment or train is left unattended. It may be necessary for emergency responders to modify the state of the equipment for the performance of their jobs by going on, under, or between equipment. Railroads have already developed these procedures, which require inspections so that a qualified employee subsequently inspects the equipment to make sure that the equipment continues to be properly secured before it is again left unattended. Emergency responders unfamiliar with trains and other equipment could inadvertently unsecure the train, and this provision adds an extra layer of safety to prevent such an occurrence and reduces the risk of a potential tragedy ensuing.

Under paragraph (n)(11), FRA permits railroads to adopt and then must comply with alternative securement procedures to do the following: (i) In lieu of applying hand brakes as required under paragraph (n), properly maintain and use mechanical securement devices, within their design criteria and as intended within a classification yard or on a repair track. (ii) In lieu of compliance with the associated requirement in paragraph (n)(2) of this section—and in lieu of applying hand brakes as required under paragraph (n)—isolate the brake pipe of standing equipment from atmosphere if it: (A) Initiates an emergency brake application on the equipment; (B) Closes the angle cock; and (C) Operates the locomotive directly to the opposite end of the equipment for the sole purpose to either open the angle cock to vent to atmosphere or provide an air source.

This information collected is used by railroads to provide them flexibility to use in a prescribed location an alternative means of securement in lieu of hand-brakes per the remainder of paragraph (n). Like in TB 10-01, FRA continues to believe in this rule that unattended equipment in classification yards—a series of tracks where locomotives and cars are classified or switched to dismantle and make-up train sets—present situations where alternate forms of securement can be allowed. Classification yards may have hump, bowl, flat or severe grades, or other characteristics. These characteristics and other local conditions, such as prevailing winds and possible severe weather, should be considered by the railroad in developing its instructions for using alternate forms of securement. The burden of proof is on the railroad in the use of alternate securement. If alternate securement is not effective, securement defaults to the application of a sufficient number of hand brakes. FRA inspectors review alternative securement procedures to make sure that they are sufficient to secure unattended equipment.

Finally, section 232.105(h)(1) states that, after March 1, 2017, each locomotive left unattended outside of a yard be equipped with an operative exterior locking mechanism.

Paragraphs (h)(2) and (h)(3) are meant to ensure that locking mechanisms, if broken or otherwise inoperative, are repaired in a reasonable timeframe. FRA expects that each locomotive equipped with a locking mechanism will be inspected and maintained at the time of the locomotive's periodic inspection. If a locking mechanism is found inoperative at any time other than the periodic inspection, paragraph (h)(3) would require the railroad to repair it within 30 days. However, if the periodic inspection falls within the 30-day limit for repair, FRA would expect that the lock will be repaired at the time of the periodic inspection in accordance with the requirement in paragraph (h)(2).

FRA will use the information collected under this section, particularly the inspection data recorded on Form FRA F 6180.49A, to ensure that the necessary inspections are being carried out and timely repairs are made when broken or damaged exterior locks are discovered. Denying access to locomotives and other railroad equipment to non-railroad personnel is another step in keeping the rail environment safe for all.

On October 16, 2008, FRA added a new subpart G in its final rule relating to ECP brakes that contain additional information collection requirements.<sup>1</sup> The final rule also identified provisions of the existing regulations and statutes where FRA proposed to provide flexibility to facilitate the voluntary adoption of this advanced brake system technologies. To date, the industry has not fully utilized ECP brake system technologies. Thus, there will be no burden associated with added sections under subpart G at this time.

FRA uses waiver information to determine whether it is consistent with railroad safety and in the public interest to grant exemptions to railroads concerning the requirements spelled out in this regulation.

Defective equipment is tagged with information prescribed in § 232.15. Railroads may use either a tag/card or an automated tracking system approved by FRA to identify defective locomotives/cars. The information is used both by FRA/State inspectors and by railroad workers. FRA/State inspectors use the information for compliance purposes, particularly during audits in order to verify that railroads are following the requirements set out in the rule. FRA/State inspectors use the information to ensure that defective cars/locomotives are moved properly; that they are moved to the correct destinations; and that necessary repairs are performed.

Railroad workers use the information to identify the nature of the defect; to ensure that defective cars/locomotives are handled properly so that they are not unnecessarily injured during these movements; and to ensure that these defective cars/locomotives are moved to the proper/correct destinations and not beyond, thus avoiding unnecessary additional costs to their employers and higher safety risks to the public and to themselves that such mistakes would bring. Also, railroad workers use defective tags/cards to notify the person in charge of the train in which the car or locomotive is to be moved and all other crew members of the presence of the defective car/locomotive and to inform them of the maximum speed and other restrictions that apply to the movement of these cars.

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<sup>1</sup> 73 FR 61511.

FRA reviews petitions for special approval of an alternative standard to determine whether the proposed alternative can be substituted for a particular requirement(s) of this Part. Specifically, FRA reviews these petitions for special approval to ensure that appropriate data or analysis, or both, are provided for the agency to consider in determining whether the alternative standard proposed by the railroad will provide at least an equivalent level of safety to FRA's regulation. FRA also reviews these petitions for special approval of an alternative standard and accompanying documents to ensure that the railroad includes a statement affirming that a copy of the petition has been served on designated representatives of the railroad's employees. FRA reviews these accompanying documents to confirm that a list of the names and addresses of the persons served by the railroad is included. FRA seeks to ensure that railroad employee representatives and railroad employees are kept fully informed concerning decisions affecting their health and safety.

With one exception, all railroad cars are required to have a legible stencil, sticker, or badge plate affixed to the car displaying the permissible brake cylinder piston travel range for the car at Class I brake tests and the length at which the piston travel renders the brake ineffective, if different from Class I brake test limits. Train crews and mechanics performing brake system inspections use this information to determine when a freight car's air brakes are not in effective operating condition based on piston travel. This information is essential in order for qualified railroad personnel to properly perform the brake inspections required by this regulation because of the growing number of cars with other than standard brake designs.

FRA reviews railroad plans to monitor all yard air sources (other than locomotives) to ensure that railroads have set up a method by which they can verify that yard air sources operate as intended and do not introduce contaminants into the brake system of freight equipment. The required monitoring plan mandates that railroads inspect each yard air source at least two times per calendar year – no less than five months apart – to ensure it operates as intended and does not introduce contaminants into the brake system of the equipment it services and thereby jeopardize the effectiveness of the brake system to stop the car.

Each monitoring plan must also identify yard air sources found not to be operating as intended or found introducing contaminants into the brake system of the equipment it services. Additionally, each monitoring plan must provide for repair or other remedial action concerning any yard air source identified as not operating as intended or found introducing contaminants into freight car brake systems. Finally, each monitoring plan must provide for the maintenance of records relating to yard air sources found not to be operating as intended or found introducing contaminants into the brake system. FRA reviews these records during routine inspections and audits to verify railroads are complying with this regulation, particularly that they are implementing their monitoring program and take the necessary steps to maintain and promote rail safety. These records must be maintained for at least one year from the date of creation.



Locomotive engineers are required to be informed of the operational status of the dynamic brakes on all locomotive units in the train consist at the initial terminal or point of origin for a train and at other locations where a locomotive engineer first begins operation of the train. This information must be maintained in written or electronic form in the cab of the locomotive, and is reviewed by the locomotive engineer so that he/she knows the operational status of the dynamic brakes on all locomotives in the consist at the initial terminal or point of origin where he/she first takes charge of the train. Locomotive engineers use this information to operate the train in the safest and most efficient manner possible.

Moreover, all dynamic brakes found to be inoperative must be tagged, and must be repaired within 30 calendar days of becoming inoperative or at the locomotive's next periodic inspection, whichever comes first. Train crews use this information to ensure that a locomotive with inoperative, or deactivated dynamic brakes is not placed in the controlling/lead position of a consist, unless the locomotive has the capability of controlling the dynamic braking effort in the trailing locomotives in the consist that are so equipped and unless the locomotive has the capability of displaying to the locomotive engineer the deceleration rate of the train or the total dynamic brake retarding force.

FRA reviews required railroad written operating rules relating to operating trains with dynamic brake systems to ensure that railroads have developed appropriate written operating rules governing safe train handling procedures using dynamic brakes under all operating conditions. These operating rules must be tailored to the specific equipment and territory of the railroad. The required operating rules are used by railroads/their employees and enable them to analyze the safety impacts of the various ways to handle potentially dangerous situations.

The railroad's operating rules must ensure that friction brakes are sufficient by themselves, without the aid of dynamic brakes, to stop the train under all operating conditions, and must include a miles-per-hour-overspeed-top rule. At a minimum, each miles-per-hour-overspeed-top rule must require that any train, when descending a grade of one percent or greater, shall be immediately brought to a stop, by an emergency brake application if necessary, when the train's speed exceeds the maximum authorized for that train by more than five miles per hour. FRA reviews railroads' operating rules to confirm that enough necessary forethought is exerted to develop necessary procedures so as to potentially pre-empt many mistakes that cause dangerous situations to occur.

Train brake system maintenance standards are used by railroads both as a training tool to qualify new train brake system inspectors and as a check list for supervisors performing spot checks of train brake system maintenance work.

Training records are used by railroads to demonstrate that individuals responsible for train brake system inspection, maintenance, and tests meet the minimum qualification requirements enumerated in the rule. The training and qualification requirements provide FRA with the ability to independently assess whether the training provided to a specific individual adequately addresses the tasks for which the individual is deemed capable of

performing, and serves to prevent potential abuses by railroads to use insufficiently trained individuals to perform the necessary inspections, tests, and maintenance required by this rule.

FRA requires Class I brake tests (initial terminal inspection), Class IA brake tests (1,000 mile inspection), and Class II brake tests (intermediate inspections) be performed and the qualified person performing the “roll-by” inspection communicate the results of the inspection to the operator of the train. Locomotive engineers and train crews use the “roll-by” inspection information to determine when the train they are operating is due attention for testing and inspection purposes, thus enhancing the continued safe operation of the train. To have a train operate without these tests being performed could create an unsafe condition and risk the safety of the general public and railroad employees.

Railroad employees use the required single car test due date stenciling (a form of recordkeeping) to ascertain when a car's next scheduled single car test is due. Railroad employees use required the end-of-train device stenciling (again a form of recordkeeping) to ascertain when a two-way end-of-train device is due for calibration. For extended haul trains, FRA requires the performance of an inbound inspection at destination or at 1,500 miles, and requires carriers to maintain records of all defective conditions discovered on these trains for a period of one year.

Railroads must maintain a record of all defective, inoperative, or ineffective brakes, as well as any conditions not in compliance with Parts 215 and 231 of this Chapter discovered at any time during the movement of the train. FRA uses these records to enhance the agency's ability to independently monitor railroads' operation of these types of trains. FRA also uses these records to assess the quality of a railroad's inspection practices and to help FRA identify any systematic brake or mechanical problems that may result from these types of

Finally, FRA requires special approval for new brake system technology by the Associate Administrator for Safety and reviews railroads' plans before implementation to ensure that all safety risks have been reduced to a level that permits the new brake system technology to be used in revenue service.

### **3. Extent of automated information collection.**

FRA strongly endorses and highly encourages the use of advanced information technology, wherever possible, to reduce burden on respondents. Under the requirement in § 232.103(n)(7)(i), railroad notification to FRA that they have developed a plan specifying specific locations or circumstances when railroad equipment may be left unattended may be transmitted electronically or in writing. Such plans must be furnished to FRA upon request, and here, too, railroads may transmit them electronically via e-mail or fax or in writing.

Under § 232.103(n)(10), railroads are required to adopt and comply with procedures to ensure that, as soon as safely practicable, a qualified employee verifies the proper securement of any unattended equipment when the railroad has knowledge that a non-railroad emergency responder has been on, under, or between the equipment. Informational records regarding inspection of equipment by a qualified employee may be kept electronically.

Under § 232.105(h)(2), railroads are required to inspect and, where necessary, repair the locking mechanism during a locomotive's periodic inspection required in § 229.23 of this chapter. Records of inspection and repairs made may be kept electronically by railroads.

Under § 232.205(e), railroads are required to submit notification that the Class I brake test was satisfactorily performed and provide the information to the locomotive engineer or place the information in the cab of the controlling locomotive. The record may be maintained electronically or written.

It is up to each railroad to decide for itself the most appropriate method of recordkeeping. In keeping with both the goals of the 1995 Paperwork Reduction Act (PRA) and the 1998 Government Paperwork Elimination Act (GPEA), FRA has sought to reduce burden, wherever possible, by permitting the use of an electronic or automated option in order to allow railroads to determine for themselves the most cost-effective and convenient method to fulfill the rule's paperwork requirements.

Due to the nature of this rule's current and new requirements, approximately 21 percent of responses may be kept electronically.

**4. Efforts to identify duplication.**

To FRA's knowledge, this information is not duplicated anywhere. Similar data is not available from any other source.

**5. Efforts to minimize the burden on small businesses.**

The "universe" of the entities under consideration includes only those small entities that can reasonably be expected to be directly affected by the provisions of this rule. In this case, the "universe" will be all Class III freight railroads.

The U.S. Small Business Administration (SBA) stipulates in its "Size Standards" that the largest a railroad business firm that is "for-profit" may be, and still be classified as a "small entity," is 1,500 employees for "Line Haul Operating Railroads" and 500 employees for "Switching and Terminal Establishments." "Small entity" is defined in the Act as a small business that is independently owned and operated, and is not dominant in its field of operation. Additionally, section 601(5) defines "small entities" as governments of cities, counties, towns, townships, villages, school districts, or special districts with populations less than 50,000.

Federal agencies may adopt their own size standards for small entities in consultation with SBA and in conjunction with public comment. Pursuant to that authority, FRA has published a final policy that formally establishes “small entities” as railroads which meet the line haulage revenue requirements of a Class III railroad, which is \$20 million or less in inflation-adjusted annual revenues, and commuter railroads or small governmental jurisdictions that serve populations of 50,000 or less.<sup>2</sup> The \$20 million limit is based on the Surface Transportation Board’s revenue threshold for a Class III railroad carrier. Railroad revenue is adjusted for inflation by applying a revenue deflator formula in accordance with 49 CFR 1201.1-1. The current threshold is \$39.2 million or less.<sup>3</sup> FRA is using this definition for the final rule. For other entities, the same dollar limit in revenues governs whether a railroad, contractor, rail equipment supplier, or other respondent is a small entity.

This final rule will be applicable to all railroads, although not all changes will be relevant to all railroads. Based on the railroads required to report accident/incidents to FRA under 49 CFR part 225, out of 751 railroads (excluding passenger service railroads that are subject to their own brake standards), FRA estimates there are approximately 735 Class III railroads; with 692 of them operating on the general system. These are of varying size, with some a part of larger holding companies. Therefore, this rule will impact a substantial number of small railroads.

FRA is aware of four firms manufacturing EOT devices for sale in the United States, and a firm that supplies the radio used for telemetry in EOT devices. Of the EOT device manufacturers, only DPS Electronics, Inc. is a small entity with about \$5 million to \$10 million in annual revenues and about 15 employees. The other firms, Siemens Industry Inc., Wabtec Railway Electronics, and Progressive Rail are larger companies with access to their larger parent companies’ resources. Ritron, Inc. manufactures the radio used in many firms’ EOT devices and is a small entity with about \$16 million in annual revenue and 90 employees. Therefore, this rule will impact a substantial percentage of suppliers (40 percent).

FRA has determined that the impact on small entities will not be significant. In particular, the extension of time that freight rail equipment can be off-air before requiring a new brake test and inspection will result in significant cost savings from conducting fewer tests. FRA expects another important benefit will be better crew management. On a small railroad, employees often “wear several hats,” that is, perform several types of jobs, ranging from office work to train operations.

Under the final rule, these railroads will be able to make available for other railroad jobs the time an employee would have spent conducting a brake test. The provision will likely

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<sup>2</sup> See 68 FR 24891 (May 9, 2003); 49 CFR Part 209, app. C.

<sup>3</sup> The Class III railroad revenue threshold is \$39,194,876 or less, for 2018. (The Class II railroad threshold is between \$39,194,876 and \$489,935,956; and the Class I railroad threshold is \$489,935,956 or more.) See Surface Transportation Board FAQs, *available at* <https://www.stb.gov/econdata.nsf/eb5a2730831be9b8852575a000495ec8/48f3885d7a5b882e852575190052fa79?OpenDocument>.

increase the efficiency of labor resources, to some degree. Small railroads that do not operate newer types of equipment, such as EOT devices with air powered generators, can continue to perform tests in substantially the same manner as before this final rule.

Ritron may choose to continue to file an annual report to FRA if it does not specify a calibration period. If Ritron chooses the report option, FRA estimates this report will take 12 hours to do and cost about \$800 per year, or \$854 when annualized using a 7 percent discount rate. FRA estimates this cost, or reduction in cost savings, as a percent of Ritron's annual revenues (about \$16 million) to be minimal at 0.006 percent. The safety reason for these reports is to enable FRA to ascertain the performance of the PLL radios (i.e., transceivers) over time.

FRA estimates the new training requirement will affect about 10 percent of Class III railroads that operate trains with the two-way EOT devices subject to this requirement, or 69 small railroads. Analogous to estimating these costs in the primary RIA analysis for all railroads, the cost for Class III railroads is estimated as primarily the cost for railroads to modify their training plans. Specifically, FRA estimates 15 minutes to revise training plans (done at the same time when training plans are reviewed generally). Railroads already train their train crews how to initiate an emergency brake application in a locomotive, so the marginal time to add this requirement will be minimal. FRA estimates this total cost is \$1,242, or only \$18 per railroad. FRA determines this cost is not significant. Furthermore, this cost is only accounted for in the first year of the rule. (ASLRRRA reports the average freight revenue per Class III railroad is \$4.8 million per year. )

In addition, suppliers that make railroad EOT devices will be positively affected. In the past, they have applied to FRA for waivers for technological improvements to their devices, and their waivers are incorporated in this final rule, saving the cost to file a waiver renewal.

Consistent with the findings of FRA's IRFA, and the lack of any comments received on it, the Administrator of FRA hereby certifies that this rule will not have a significant economic impact on a substantial number of small entities.

## **6. Impact of less frequent collection of information.**

If the information were not collected or collected less frequently, rail safety in the United States would be seriously jeopardized. The data collected under part 232 allows FRA to mitigate unsecured locomotive and train incidents. Without this information, it is likely that there would be more rail accidents/incidents involving unsecured locomotives and trains.

The requirements under § 232.103(n) enhance safety by both ensuring that affected railroads develop plans that identify specific locations or circumstances where rail equipment may be left unattended and requiring employee verification with another qualified employee of securement of a freight train or freight car left unattended.

Under § 232.103(n)(10), FRA requires railroads to develop procedures to ensure that a qualified railroad employee inspects all equipment that any emergency responder has been on, under, or between for proper securement before the rail equipment or train is left unattended. Without the requirements under § 232.105(h), there would be no way to ensure that locking mechanisms for locomotive cabs are repaired in a reasonable time frame if broken or damaged.

Without the required inspection records in this collection of information, FRA would have no way to verify that the periodic maintenance requirements contained in §232.303(b)-(d) relating to the inspection of freight cars equipped with an ECP brake system were fulfilled according to Federal safety requirements. In the event of an accident/incident, these records would be essential to any investigation seeking to determine exactly what transpired.

Without the collection of information under the new amendments, locomotive engineers would not be informed of the operational status of the dynamic brakes on all conventional locomotive units in the consist at the initial terminal or point of origin for a train, or at other locations where they first take charge of a train. This could lead to dangerous train handling situations and to an increase in the number of rail accidents/incidents and associated injuries/fatalities to crew members, as well as increased property damage. Also, if this information were not collected, yard air sources would not be monitored to ensure that they operate as intended. As a result, contaminants could be introduced into the brake system of freight equipment which could affect the functioning of the brakes and thus negatively impact railroad safety.

If this information were not collected or collected less frequently, FRA could not ensure that necessary brake inspections, tests, and repairs are completed. Consequently, the discovery and correction of minor defects would not occur in time to prevent them from becoming major defects and the source of severe rail accident/incidents. Also, without this information collection, FRA could not ensure that railroads adopt and implement a training, qualification, and designation program for employees and contractors who perform conventional brake system inspections, tests, and maintenance. Having unqualified employees work on conventional freight brake systems would endanger the safety of train crews, the general public, and the intact delivery of train cargo.

In sum, this collection of information advances the mission of FRA, which is to ensure, and promote safety throughout the U.S. rail system.

7. **Special circumstances.**

All information collection requirements contained in this rule are in compliance with this section.

8. **Compliance with 5 CFR 1320.8.**

As noted in the summary section, FRA is publishing a Notice of final rule in the Federal Register on December 11, 2020, titled Miscellaneous Amendments to Brake System Safety Standards and Codification of Waivers.<sup>4</sup> FRA received no public comments on the information collection requirements specific to the burden hours contained in the NPRM.

FRA issued an NPRM in the Federal Register on January 15, 2020, soliciting comments on the proposed rule and its accompanying information collection requirements from the regulated community, the general public, and interested parties.<sup>5</sup>

**9. Payments or gifts to respondents.**

There are no monetary payments or gifts made to respondents associated with the information collection requirements contained in this regulation.

**10. Assurance of confidentiality.**

Information collected is not of a confidential nature, and FRA pledges no confidentiality.

**11. Justification for any questions of a sensitive nature.**

There are no questions or information of a sensitive nature or data that would normally be considered private contained in this information collection.

**12. Estimate of burden hours for information collected.**

The estimates for the respondent universe, annual responses, and average time per responses are based on the experience and expertise of FRA's Office of Railroad Infrastructure and Mechanical Equipment.

The total annual burden hours, under the fourth column, is calculated by multiplying total

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<sup>4</sup> 85 FR 80544.

<sup>5</sup> 85 FR 2494

annual responses by average time per responses. For example, 30,000 records of tests \* 30 seconds = 250 hours.

The total cost equivalent, under the fifth column, is calculated by multiplying total annual burden hours by the appropriate employee group hourly wage rate that includes a 75-percent overhead charge. For example, 2.5 hours \* \$76 = \$190. FRA is including the dollar equivalent cost for each of the itemized hours below using the Surface Transportation Board's (STB) Full-Year Wage A&B data series as the basis for each cost

calculation. For professional and administrative staff, the hourly wage rate is \$72 per hour ( $\$41.15 * 1.75 = \$72$ ) in 2017 dollars. FRA is including the dollar equivalent cost for each of the itemized hours below using STB's Full-Year Wage A&B data series as the basis for each wage cost calculation.

CFR Section <sup>6</sup>	Respondent universe	Total Annual responses (A)	Average time per responses (B)	Total annual burden hours (C = A * B) <sup>7</sup>	Total cost equivalent (D = C * wage rate)	Section Analyses and Estimates
229.27 - Annual tests	30,000 locomotives	30,000 records of tests	30 seconds	250 hours	\$18,000	Load meters that indicate current (amperage) being applied to traction motors shall be tested. Each device used by the engineer to aid in the control or braking of the train or locomotive that provides an indication of air pressure electronically shall be tested by comparison with a test gauge or self-test designed for this purpose. The date and place of the test shall be recorded on Form FRA F 6180-49A, and the person conducting the test and that person's supervisor shall sign the form.  FRA estimates that each record will take 30 seconds to complete.
231.31- Drawbars for	FRA estimates that it will receive zero (0) letters annually under this					On railroads operating on track with a gage

<sup>6</sup> Note: The provisions for §§ 232.1 and 232.213(a)(4) no longer apply. The burdens for §§ 232.103(n)(1), 232.103(n)(3)(iv), 232.103(n)(4), 232.103(n)(9), 232.103(n)(10) and 232.103(n)(11) have been fulfilled by railroads.

<sup>7</sup> Totals may not add due to rounding.



freight cars; standard height	requirement.					other than those contained in paragraphs (a)(1) through (a)(3) of this section, the maximum and minimum height of drawbars for freight cars operating on those railroads shall be established upon written approval of FRA.
232.3 - Applicability - Export, industrial, & other cars not owned by railroads-identification	708 railroads	8 cards	10 minutes	1 hour	\$72	Export, industrial, and other cars not owned by a railroad which are not to be used in service, except for movement as shipments on their own wheels to given destinations. Such cars shall be properly identified by a card attached to each side of the car, signed by the shipper, stating that such movement is being made under the authority of this paragraph.  FRA estimates that each form will take 10 minutes to complete.
232.7 - Waivers	708 railroads	2 petitions	160 hours	320 hours	\$23,040	Any person subject to a requirement of this part may petition FRA for a waiver of compliance with such requirement. The filing of such a petition does not affect that person's responsibility for compliance with that requirement while the petition is being considered. Each petition for waiver must be filed in the manner and contain the information required by Part 211 of this Chapter.  FRA estimates that each petition will take 160 hours to complete.
232.15 - Movement of Defective Equipment - Tags/Records	1,620,000 cars	128,400 tags/records	2.5 minutes	5,350 hours	\$385,200	At the place where the railroad first discovers the defect, a tag or card shall be placed on both sides of the defective equipment or locomotive and in the cab of the locomotive, or an automated tracking system approved for use by FRA shall be provided.

						<p>The tag or card required by paragraph (b) (1) of this section must remain affixed to the defective equipment until the necessary repairs have been performed.</p> <p>An electronic or written record or copy of each tag or card attached to or removed from a car or locomotive must be retained for 90 days and, upon request, must be made available within 15 calendar days for inspection by FRA or State inspectors.</p> <p>Each tag or card removed from a car or locomotive shall contain the date, location, reason for its removal, and the signature of the person who removed it from the piece of equipment.</p> <p>FRA estimates that it will take 2.5 minutes to prepare the record of each tag.</p>
- Written Notification	1,620,000 cars	25,000 notices	3 minutes	1,250 hours	\$90,000	<p>The person in charge of the train in which the car or locomotive is to be moved must be notified in writing and inform all other crew members of the presence of the defective car or locomotive and the maximum speed and other restrictions determined under paragraph (a)(11)(i)(B) of this section. A copy of the tag or card described in paragraph (b) of this section may be used to provide the notification required by this paragraph.</p> <p>It is estimated that it will take approximately three (3) minutes to prepare the notice and provide it to the train crew members.</p>
232.17 - Special Approval Procedure -	708 railroads	1 petition	100 hours	100 hours	\$7,200	<p>Petitions for special approval of an alternative standard or test procedure.</p>

Petitions for special approval of safety-critical revision						<p>Each petition for special approval of a plan under § 232.15(g); an alternative standard under § 232.305 or § 232.603; or a single car test procedure under § 232.611 must be submitted in triplicate to FRA.</p> <p>FRA estimates that each petition will take 100 hours to complete.</p>
- Petitions for special approval of pre-revenue service acceptance plan	708 railroads	1 petition	100 hours	100 hours	\$7,200	<p>Each petition for special approval of a pre-revenue service acceptance testing plan must be submitted to FRA.</p> <p>FRA estimates that each petition will take 100 hours to complete.</p>
- (d) Service of petitions	708 railroads	1 petition	20 hours	20 hours	\$1,440	<p>(1) Service of each petition for special approval of an alternative standard under paragraph (b) of this section must be made on the following: (i) designated employee representatives responsible for the equipment's operation, inspection, testing, and maintenance under this part; (ii) any organizations or bodies that either issued the standard incorporated in the section(s) of the rule to which the special approval pertains or issued the alternative standard that is proposed in the petition; and (iii) any other person who has filed with FRA a current statement of interest in reviewing special approvals under the particular requirement of this Part at least 30 days but not more than five (5) years prior to the filing of the petition. If filed, a statement of interest shall be filed with FRA's Associate Administrator for Safety and shall reference the specific section(s) of this Part in which the person has an interest.</p> <p>FRA estimates that each statement of</p>

						petition will take approximately 20 hours to complete.
- (d)(2)(ii) Statement of interest	Public/railroads	4 statements	15 minutes	1 hour	\$72	FRA may receive some statements of interest from railroads or the public. These will take approximately 15 minutes each to complete.
-(f) Comment	Public/railroads	6 comments	4 hours	24 hours	\$1,728	<p>Not later than 30 days from the date of publication of the notice in the Federal Register concerning a petition under paragraph (b) of this section, any person may comment on the petition.</p> <p>(1) A comment shall set forth specifically the basis upon which it is made, and contain a concise statement of the interest of the commenter in the proceeding.</p> <p>(2) The comment shall be submitted to the Associate Administrator for Safety, Federal Railroad Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590.</p> <p>(3) The commenter shall certify that a copy of the comment was served on each petitioner.</p> <p>FRA estimates that each comment on petition will take approximately four (4) hours to complete.</p>
232.103(f)(2)-Gen'l requirements - all train brake systems - stickers	1,200,000 cars	70,000 stickers/stencils/badge plates	10 minutes	11,667 hours	\$840,024	Except for freight cars equipped with nominal 12-inch stroke (8-1/2 and 10-inch diameters) brake cylinders, all cars must have a legible decal, stencil or sticker affixed to the car or must be equipped with a badge plate displaying the permissible brake cylinder piston travel range for the car at Class I brake tests and the length at

						<p>which the piston travel renders the brake ineffective, if different from the Class I brake test limits. The decal, stencil, sticker, or badge plate must be located so that it may be easily read and understood by a person positioned safely beside the car.</p> <p>FRA estimates that it will take approximately 10 minutes to affix each sticker.</p> <p>Note: The burden for § 232.109(g) is included in this section.</p>
(n)(7) – RR Plan identifying specific locations or circumstances where equipment may be left unattended	708 railroads	1 revised plan	10 hours	10 hours	\$720	<p>No equipment described in paragraph (n) (6) of this section shall be left unattended on a main track or siding (except when that main track or siding runs through, or is directly adjacent to a yard) until the railroad has adopted and is complying with a plan identifying specific locations or circumstances when the equipment may be left unattended. The plan shall contain sufficient safety justification for determining when equipment may be left unattended. The plan shall be made available to FRA upon request.</p> <p>FRA estimates that it will take approximately 10 hours to modify each plan.</p>
- Notification to FRA when RR develops and has plan in place or modifies existing plan	708 railroads	1 notice	30 minutes	1 hour	\$72	<p>The railroad must notify FRA when the railroad develops and has in place a plan, or modifies an existing plan, under this provision prior to operating pursuant to the plan.</p> <p>FRA estimates that each notification will take approximately 30 minutes.</p>

- Inspection of Equipment by Qualified Employee after Responder Visit	708 railroads	12 inspections/records	4 hours	48 hours	\$3,456	Each railroad shall adopt and comply with procedures to ensure that, as soon as safely practicable, a qualified employee verifies the proper securement of any unattended equipment when the railroad has knowledge that a non-railroad emergency responder has been on, under, or between the equipment.  FRA estimates that each inspection record will take approximately four (4) hours.
232.105 – General requirements for locomotives: Inspection	The burden for this requirement is included under OMB Control Number 2130-0004 under §229.23.					
232.107 - Air source requirements and cold weather operations – Monitoring Plan (Subsequent Years)	10 new railroads	1 plan	40 hours	40 hours	\$2,880	Each railroad must adopt, comply with, and make available to FRA upon request a plan to monitor all yard air sources, other than locomotives, to ensure that they operate as intended and do not introduce contaminants into the brake system of freight equipment.  FRA estimates that each plan will take 40 hours to complete.
- Amendments/Revisions to Plan	50 railroads/plans	10 revisions	20 hours	200 hours	\$14,400	FRA estimates that each plan revision will take 20 hours to complete.
-Recordkeeping	50 railroads/plans	1,150 records	10 minutes	192 hours	\$13,824	A railroad shall maintain records of information and actions required by paragraph (a)(2) of this section. These records shall be maintained for a period of at least one year from the date of creation, and may be maintained either electronically or in writing.  FRA estimates it will take 10 minutes to create each record.
232.109 - Dynamic	708 railroads	1,656,000	4 minutes	110,400	\$7,948,800	A locomotive engineer must be informed

brake requirements – status/record		records		hours		<p>of the operational status of the dynamic brakes on all locomotive units in the consist at the initial terminal or point of origin for a train and at other locations where a locomotive engineer first begins operation of a train. The information required by this paragraph may be provided to the locomotive engineer by any means determined appropriate by the railroad; however, a written or electronic record of the information must be maintained in the cab of the controlling locomotive.</p> <p>FRA estimates that it will take four (4) minutes to create each record.</p>
- Inoperative dynamic brakes: repair record	30,000 locomotives	6,358 records	4 minutes	424 hours	\$30,528	<p>All inoperative dynamic brakes must be repaired within 30 calendar days of becoming inoperative or at the locomotive’s next periodic inspection pursuant to §229.23 of this chapter, whichever occurs first. An electronic or written record of repairs made to a locomotive’s dynamic brakes must be retained for 92 days and, upon request, must be made available for inspection by FRA or State inspectors.</p> <p>FRA estimates that it will take four (4) minutes to create each record.</p>
- Tag bearing words “inoperative dynamic brakes”	30,000 locomotives	6,358 tags	30 seconds	53 hours	\$3,816	<p>A locomotive discovered with inoperative dynamic brakes must have a tag bearing the words “inoperative dynamic brake” securely attached and displayed in a conspicuous location in the cab of the locomotive.</p> <p>FRA estimates it will take 30 seconds to affix each tag.</p>

- Deactivated dynamic brakes (Sub. Yrs.)	8,000 locomotives	10 markings	5 minutes	1 hour	\$72	<p>A railroad may elect to declare the dynamic brakes on a locomotive deactivated without removing the dynamic brake components from the locomotive, only if all of the following conditions are met: (1) the locomotive is clearly marked with the words “dynamic brake deactivated” in a conspicuous location in the cab of the locomotive; and (2) the railroad has taken appropriate action to ensure that the deactivated locomotive is incapable of utilizing dynamic brake effort to retard or control train speed.</p> <p>FRA estimates that it will take approximately five (5) minutes to mark/stencil each locomotive.</p>
- Operating rules (Subsequent Years)	5 new railroads	5 rules	4 hours	20 hours	\$1,440	<p>Each railroad operating a train with a brake system that includes dynamic brakes must adopt, comply with, and make available to FRA upon request written operating rules governing safe train handling procedures using these dynamic brakes under all operating conditions, which must be tailored to the specific equipment and territory of the railroad.</p> <p>FRA estimates that it will take approximately four (4) hours to develop and file each operating rule.</p>
- Amendments/Revisions	708 railroads	15 revisions	1 hour	15 hours	\$1,080	<p>FRA estimates that each amendment will take approximately one (1) hour to complete and forward to FRA.</p>
- Requests to increase 5 mph overspeed restriction	708 railroads	5 requests	30 min. + 20 hours	103 hours	\$7,416	<p>The railroad's operating rules must: (1) ensure that friction brakes are sufficient by themselves, without the aid of dynamic brakes, to stop the train under all operating conditions; and (2) include a miles-per-</p>



						<p>hour-overspeed-top rule. At a minimum, this rule shall require that any train, when descending a grade of one percent or greater, must be immediately brought to a stop, by an emergency brake application if necessary, when the train's speed exceeds the maximum authorized speed for that train by more than five miles per hour. A railroad shall reduce the five miles per hour over-speed restriction if validated research indicates the need for such a reduction. A railroad may increase the five miles per hour over-speed restriction only with approval of FRA and based on verifiable data and research.</p> <p>FRA estimates that it will take approximately 30 minutes to compose the letter to FRA making this request, and an additional 20 hours to develop the verifiable data.</p>
- Knowledge criteria - locomotive engineers – Subsequent Years	5 new	5 amendments	16 hours	80 hours	\$5,760	<p>A railroad operating a train with a brake system that includes dynamic brakes must adopt, comply with specific knowledge, skill, and ability criteria to ensure that its locomotive engineers are fully trained in the operating rules prescribed by paragraph (j) of this section. The railroad shall incorporate such criteria into its engineer certification program pursuant to Part 240 of this chapter.</p> <p>FRA estimates that it will take 16 hours to make each amendment.</p>
232.111 - Train information handling	5 new railroads	5 procedures	40 hours	200 hours	\$14,400	<p>A railroad must adopt and comply with written procedures to ensure that a train crew employed by the railroad is given accurate information on the condition of the train brake system and train factors</p>

						<p>affecting brake system performance and testing when the crew takes over responsibility for the train. The information required by this paragraph may be provided to the locomotive engineer by any means determined appropriate by the railroad; however, a written or electronic record of the information must be maintained in the cab of the controlling locomotive.</p> <p>FRA estimates that it will take 40 hours to develop each procedure.</p>
Sub. Yrs.- Amendments/Revisions	100 railroads	100 revisions	20 hours	2,000 hours	\$144,000	In subsequent years, it is estimated that it will take 20 hours for each amendment.
- Report requirements to train crew	708 railroads	2,112,000 reports	5 minutes	176,000 hours	\$12,672,000	<p>This section contains a list of the specific information FRA proposes to require railroads to furnish train crew members about the train and the train's brake system at the time they take over the train.</p> <p>FRA estimates that it will take five (5) minutes to prepare each report.</p>
232.203 - Training requirements - Tr. Prog. - Sub Yr.	15 railroads	5 programs	100 hours	500 hours	\$36,000	<p>Each railroad and each contractor must adopt, comply with a training, qualification, and designation program for its employees who perform brake system inspections, tests, or maintenance.</p> <p>FRA estimates that it will take the railroad approximately 100 hours to develop such a program.</p>
- Amendments to written program	708 railroads	236 revisions	8 hours	1,888 hours	\$135,936	FRA estimates that it will take approximately eight (8) hours to develop each amendment and send it to FRA.
-Training records	708 railroads	24,781 records	8 minutes	3,304 hours	\$237,888	A railroad or contractor must maintain adequate records to demonstrate the

						<p>current qualification status of all of its personnel assigned to inspect, test, or maintain a train brake system. The records required by this paragraph may be maintained either electronically or in writing and shall be provided to FRA upon request.</p> <p>FRA estimates that it will take approximately eight (8) minutes to prepare each record.</p>
- Training notifications	708 railroads	24,781 notices	1 minute	413 hours	\$29,736	<p>As an additional means of ensuring that only properly qualified individuals are performing only those tasks for which they are qualified, FRA requires railroads to promptly notify personnel of changes in their qualification status and specifically identify the date that the employees' qualification ends unless refresher training is provided.</p> <p>FRA estimates that each notification will take approximately one (1) minute to complete.</p>
- Efficiency test plans	708 railroads	708 copies	1 minute	12 hours	\$864	<p>A railroad must adopt and comply with a plan to periodically assess the effectiveness of its training program. One method of validation and assessment could be through the use of efficiency tests or periodic review of employee performance.</p> <p>FRA estimates that it will take approximately one (1) minute to complete each test plan.</p>
232.205 – Initial terminal inspection: Class I brake tests and notifications/records (Revised requirement)	708 railroads	383,840 notices/records	45 seconds	4,798 hours	\$345,456	<p>The railroad shall ensure that a written or electronic record indicating that the Class I brake test was satisfactorily performed is provided to the locomotive engineer or placed in the cab of the controlling</p>

						<p>locomotive following the test. The written or electronic record must be retained in the cab of the controlling locomotive until the train reaches its destination and must contain the date, time, number of freight cars inspected, and identify qualified person(s) performing the test and the location where the Class I brake test was performed.</p> <p>FRA estimates that it will take approximately 45 seconds for each notice.</p>
(c)(1)(ii)(B) - RR Development /implementation of operating rules to ensure compliant operation of train if air flow exceeds stipulated section parameters after Class I brake test is completed (New requirement)	708 railroads	10 revised operating rules	8 hours	80 hours	\$5,760	<p>A train equipped with at least one distributed power unit or an air repeater unit providing a source of brake pipe control air from two or more locations must not exceed a combined flow of 90 cubic feet per minute (CFM). Otherwise, the air flow must not exceed 60 CFM. Railroads must develop and implement operating rules to ensure compliant operation of a train if air flow exceeds these parameters after the Class I brake test is completed.</p> <p>FRA estimates that it will take approximately eight (8) hours to develop each plan.</p>
(c) (1)(iii) – Form 49A notation/ certification of last date of Air Flow Method (AFM) indicator calibration (Formally under § 229.29b)	The burden for this requirement is included under OMB Control Number 2130-0004.					
232.207 - Class 1A brake tests – Designation Lists Where Performed	708 railroads	1 list	1 hour	1 hour	\$72	Each railroad must designate the locations where Class IA brake tests will be performed; the carrier must furnish to the Federal Railroad Administration upon

						<p>request a description of each location designated; and must notify in writing FRA’s Associate Administrator for Safety 30 days prior to any change in the locations designated for such tests and inspections.</p> <p>FRA estimates that each respondent will take approximately one (1) hour to prepare this designation list and file it.</p>
Subsequent Years: Notice of Change	708 railroads	250 notices	10 minutes	42 hours	\$3,024	<p>In the event of an emergency that alters normal train operations such as a derailment or other unusual circumstances that reflect on the safe operation of the train, the railroad is not required to provide prior written notification of a change in the location where a Class IA brake test is performed, provided that the railroad notifies FRA’s Associate Administrator for Safety and the pertinent FRA Regional Administrator within 24 hours after the designation has been changed and the reason for that change.</p> <p>It is estimated that it will take each respondent approximately 10 minutes to prepare the necessary amendment and file it.</p>
232.209 - Class II brake tests-intermediate “Roll-by inspection –Results to train driver	708 railroads	159,740 comments	3 seconds	133 hours	\$9,576	<p>When the release is initiated, the brakes on each car added to the train and on the rear car of the train must be inspected to verify that they did release; this may be performed by a “roll-by” inspection. If a "roll-by" inspection of the brake release is performed, train speed must not exceed 10 MPH and the qualified person performing the “roll-by” inspection must communicate the results of the inspection to the operator of the train.</p>

						FRA estimates that it will take each respondent approximately three (3) seconds to make the necessary comment.
232.213 – Written Designation to FRA of Extended haul trains	83,000 long	250 letters	15 minutes	63 hours	\$4,536	<p>A railroad may be permitted to move a train up to, but not exceeding, 1,500 miles between brake tests and inspections if the railroad designates a train as an extended haul train. The designation must be in writing sent to FRA.</p> <p>FRA estimates that it will take approximately 15 minutes to complete each request.</p>
- Notification to FRA Associate Administrator for Safety/FRA Associate Administrator for Safety of a change in the location where an extended haul brake test is performed (New requirement)	7 railroads	250 notices	10 minutes	42 hours	\$3,024	<p>In the event of an emergency that alters normal train operations, such as a derailment or other unusual circumstance that adversely affects the safe operation of the train, the railroad is not required to provide prior written notification of a change in the location where an extended haul brake test is performed to a location not on the railroad's list of designated locations for performing extended haul brake tests, provided that the railroad notifies FRA's Associate Administrator for Safety within 24 hours after the designation has been changed and the reason for that change.</p> <p>FRA estimates that it will take approximately 10 minutes to complete each notification.</p>
232.219(c)(4) – Double heading and helper service: Testing/calibration/records of Helper Link	2 railroads	100 records	5 minutes	8 hours	\$576	Each device shall be tested for accuracy and calibrated if necessary according to the manufacturer's specifications and procedures every 365 days. This shall include testing radio frequencies and

devices used by locomotives (formerly under 232.219(c)(3))						<p>modulation of the device. A legible record of the date and location of the last test or calibration shall be maintained with the device.</p> <p>FRA estimates that each record will take approximately five (5) minutes to complete.</p>
232.303 - General requirements - single car test: Tagging of Moved Equipment	1,600,000 frgt.	5,600 tags	5 minutes	467 hours	\$33,624	<p>If it is necessary to move a car from the location where the repairs are performed in order to perform a repair track brake test or a single car test required by this part, a tag or card must be placed on both sides of the equipment, or an automated tracking system approved for use by FRA.</p> <p>FRA estimates that will take approximately five (5) minutes to complete each tag.</p>
- Last repair track brake test/single car test – Stenciled on Side of Equipment	1,600,000 frgt.	240,000 markings	2 minutes	8,000 hours	\$576,000	<p>The location and date of the last repair track brake test or single car test required by § 232.305 must be clearly stenciled, marked, or labeled in two-inch high letters or numerals on the side of the equipment. Alternatively, the railroad may use an electronic or automated tracking system to track the required information and the performance of the tests required by § 232.305.</p> <p>FRA estimates that will take approximately two (2) minutes to complete each stencil.</p> <p>Note: The burden for § 232.305 is included in this section.</p>
232.307 - Modification of single car air brake test procedures: Requests (includes 232.409(e))	railroads/AAR	1 request + 3 copies	20 hours + 5 minutes	20 hours	\$1,440	<p>The AAR or other authorized representative of the railroad industry may seek modification of the single car air brake test procedures prescribed in § 232.305(a). The request for modification</p>

						<p>must be submitted in triplicate to FRA.</p> <p>FRA estimates that it will take approximately 20 hours to complete each request, and approximately five (5) minutes to complete each required copy of the request.</p>
- Affirmation Statement on Mod. Req. To Employee Representatives	railroads/AAR	1 statement + 4 copies	30 minutes + 5 minutes	1 hour	\$72	<p>A statement is required, affirming that the railroad industry has served a copy of the request on the designated representatives of the employees responsible for the equipment's operation, inspection, testing, and maintenance under this part.</p> <p>When FRA grants or denies a request for modification, or reopens a consideration of the request, written notice is sent to the requesting party and other interested parties.</p> <p>FRA estimates that it will take approximately 30 minutes to complete each affirmative statement and approximately five (5) minutes to copy and send the modification request.</p> <p>Note: The burdens for §§ 232.407 and 232.409(e) are included in this section.</p>
- Comments on modification request	FRA estimates that it will receive zero (0) letters annually under this requirement.					
232.309 - Repair track brake test equipment and devices used to perform single car air brake tests - Periodic calibration of devices	640 shops	5,000 records of calibrations	2 minutes	167 hours	\$12,024	<p>FRA is requiring that mechanical devices and gauges be tested and calibrated every 92 days; whereas, electronic gauges and devices appear to have much less exposure to many of the hazards encountered by mechanical devices and gauges and tend to be much more reliable and accurate for a longer period of time. Consequently, FRA</p>



						<p>only requires electronic yard test devices and gauges to be tested and/or calibrated on an annual basis.</p> <p>FRA estimates that each test will take approximately two (2) minutes to perform the test and record the results.</p>
232.403 - Unique Code	245 railroads	12 requests	5 minutes	1 hour	\$72	<p>Each rear unit shall have a unique and permanent identification code that is transmitted along with the pressure message to the front-of-train unit.</p> <p>FRA estimates that it will take approximately five (5) minutes to request a code from AAR or FRA.</p>
232.409 – Inspection/Tests/Records EOTs	245 railroads	447,500 recording of tests	30 seconds	3,729 hours	\$268,488	<p>A two-way end-of-train device must be tested at the initial terminal or other point of installation to ensure that the device is capable of initiating an emergency power brake application from the rear of the train. If this test is conducted by a person other than a member of the train crew, the locomotive engineer must be notified that a successful test was performed. The notification required by this paragraph may be provided to the locomotive engineer by any means determined appropriate by the railroad; however, a written or electronic record of the notification must be maintained in the cab of the locomotive and must include the date and time of the test, the location where the test was performed, and the name of the person conducting the test.</p> <p>FRA requires that the locomotive engineer be informed in an appropriate way determined by the railroad when the required tests and inspections are</p>

						<p>performed by a person other than a train crew member. FRA requires that a record, either electronic or written, of the notification be kept in the cab of the locomotive.</p> <p>FRA estimates that each record will take 30 seconds to complete.</p>
--(d)-(e) Telemetry equipment – Testing/ Calibration/Records/ -- Documentations of testing (paragraph (d) is a revised requirement; paragraph (e) classifies the use of 229.27)	245 railroads	17,000 records	2 minutes	567 hours	\$40,824	<p>The telemetry equipment must be tested for accuracy and calibrated if necessary according to the manufacturer's specifications and procedures at least every 365 days. This must include testing radio frequencies and modulation of the device. The date and location of the last calibration or test, as well as the name of the person performing the calibration or test, must be legibly displayed on a weather-resistant sticker or other marking device affixed to the outside of both the front unit and the rear unit; however, if the front unit is an integral part of the locomotive, then the above information may be recorded on Form FRA F6180.49A, provided the serial number of the unit is recorded.</p> <p>FRA estimates that it will take approximately two (2) minutes per unit to make the record.</p>
---(f)(2) Annual report to FRA on radios found with frequency drift (New requirement)	1 manufacturer	1 report	12 hours	12 hours	\$864	<p>A manufacturer must describe in its annual report to FRA each time it repairs or reconditions a radio for an EOT device if it does not establish a calibration period for the device.</p> <p>FRA estimates that each annual report will take 12 hours to complete.</p>

232.503- Process to introduce new brake technology	708 railroads	1 letter	1 hour	1 hour	\$72	<p>Pursuant to the procedures contained in § 232.17, each railroad must obtain special approval from FRA of a pre-revenue service acceptance testing plan, developed pursuant to § 232.505, for the new brake system technology, prior to implementing the plan.</p> <p>FRA estimates that it will take one (1) hour to complete each letter.</p>
- Special approval	708 railroads	1 request	3 hours	3 hours	\$216	<p>Each railroad must complete a pre-revenue service demonstration of the new brake system technology in accordance with the approved plan; must fulfill all of the other requirements prescribed in § 232.505; and must obtain special approval from FRA under the procedures of § 232.17 prior to using such brake system technology in revenue service.</p> <p>FRA estimates that each request will take three (3) hours to complete.</p>
232.505 - Pre-revenue service acceptance test plan - Submission of maintenance procedure	708 railroads	1 procedure	160 hours	160 hours	\$11,520	<p>Except as provided in paragraph (f) of this section, before using a new brake system technology for the first time on its system, the operating railroad or railroads must submit a pre-revenue service acceptance testing plan containing the information required by paragraph (e) of this section and obtain the approval of FRA.</p> <p>FRA estimates that it will take 160 hours to create and submit each plan.</p>
- Amendments to maintenance procedure	708 railroads	1 revision	40 hours	40 hours	\$2,880	<p>FRA estimates that it will take 40 hours to submit an amended maintenance procedure.</p>
- Design description	708 railroads	1 petition	67 hours	67 hours	\$4,824	<p>FRA estimates that it will take the railroad approximately 67 hours to create a new</p>

						design requirement for new train brake system technology.
- Report to FRA Assoc. Admin. for Safety	708 railroads	1 report	13 hours	13 hours	\$936	Railroads must report to FRA the results of the pre-revenue service acceptance tests.  FRA estimates that it will take the railroad approximately 13 hours to prepare, review, and submit its report to FRA analyzing the results of its pre-revenue service tests.
- Brake system technology testing	708 railroads	1 description	40 hours	40 hours	\$2,880	For brake system technologies that have previously been used in revenue service in the United States, the railroad must test the equipment on its system, prior to placing it in revenue service, to ensure the compatibility of the equipment with the operating system (track, signals, etc.) of the railroad. A description of such testing must be retained by the railroad and made available to FRA for inspection and copying upon request.  FRA estimates that it will take each railroad approximately 40 hours to prepare, and send the testing description.
232.717(c) – Freight and passenger train car brakes – Written maintenance plan (formerly under appendix B, recodifies subpart H)	40 railroads	40 written plans	6 hours	240 hours	\$17,280	Under paragraph (c), these railroads—when utilizing equipment not covered by an applicable, available, and incorporated AAR standard—would have to maintain the equipment in a safe and suitable condition for service according to a railroad’s written maintenance plan. A compliant maintenance plan, including its COT&S component and a periodic attention schedule, must be based upon a standard appropriate to the equipment. For example, a compliant plan might utilize a recognized industry standard or a former AAR interchange standard, to the extent it

						is modified to account for the unique operating conditions of the particular tourist railroad operation. The railroad must make its written maintenance plan available to FRA upon request.  FRA estimates that it will take each railroad six (6) hours to develop a maintenance plan.
Total	708 railroads	5,345,581 responses	N/A	333,682 hours	\$24,025,104	

**13. Estimate of total annual costs to respondents.**

**Rule Costs**

Section 232.105(h) of the rule requires, after March 1, 2017, that each locomotive left unattended outside of a yard shall be equipped with an operative exterior locking mechanism. AAR standard S-5520 requires that each locomotive left unattended outside of a yard shall be equipped with an operative exterior locking mechanism, and requires that locomotives be equipped in

order to be used in interchange service. These mechanisms will meet the requirements of § 232.105(h). The unit cost for a locking mechanism meeting AAR standard S-5520 is \$215.

FRA believes that smaller railroads could comply with § 232.105(h) with a simpler lock and hasp system, for a unit cost of \$100. Given the smaller number of locomotives, personnel, territory, and facilities, use of this type of system would not be problematic. FRA believes that no more than 500 locomotives belonging to Class III railroads lack locking mechanisms that comply with new § 232.105(h). Thus, the cost to install the locking mechanisms would be no more than 500 times \$100, or **\$50,000**.

### **Additional Costs**

Besides the costs to respondents enumerated in the answer to question number 12, there are other miscellaneous costs that railroads will incur annually from the old requirements.

They are as follows:

\$7,029.90 Cost to print 140,598 tags @ \$.05 per tag + 3,500.00 Cost for 70,000 stickers @ \$.05 ea. = \$10,529.90

\$60,530 GRAND TOTAL

## **14. Estimate of Cost to Federal Government.**

- A. There is no additional cost to the Federal Government related to the new rulerequirements.
- B. The reports required to be submitted to FRA will be reviewed and evaluated by a Motive Power and Equipment Specialist in Washington, D.C. It is estimated 200 hours will be required annually for these reviews. Based on \$116 per man hour,<sup>8</sup> the annual cost to the Federal Government is \$23,200.

## **15. Explanation of program changes and adjustments.**

This information collection request is a revision to the last approved submission. FRA is requesting a total burden of 333,682 hours and 5,345,581 responses. Overall, the burden for this submission has decreased by 746,563 hours and by 25,179,767 responses. The change in burden is due to program changes (a decrease) and adjustments (a decrease).

FRA provided a thorough review of this package and determined many of the PRA estimates were overestimated and some estimates were not PRA requirements. For

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<sup>8</sup> GS-14, Step 5 annual salary of \$137,491 divided by 2,080 annual hours plus 75-percent overhead.

instance, the amount of time for recordkeeping has been reduced because the industry is using automated recordkeeping systems which is less burdensome. The tables below provide the specifics on any burden estimates that have changed from the previous submission.

**TABLE FOR PROGRAM CHANGES**

CFR Section	Total Annual Responses			Average Time per Response		Total Annual Burden Hours		
	Current submission	Requesting submission	Difference (plus/minus)	Current submission	Requesting submission	Current	Requesting submission	Difference (plus/minus)
232.205 – Initial terminal inspection: Class I brake tests and notifications/records (Revised requirement) <sup>9</sup>	1,646,000 notices/ records	383,840 notices/ records	-1,262,160 responses	45 seconds	45 seconds	20,575 hours	4,798 hours	-15,777 hours
(c)(1)(ii)(B) - RR Development /implementation of operating rules to ensure compliant operation of train if air flow exceeds stipulated section parameters after Class I brake test is completed (New Requirement)	0	10 revised operating rules	10 responses	0	8 hours	0	80 hours	80 hours
232.213 - Notification to FRA Associate Administrator for Safety of a change in the location where an extended haul brake test is performed (New Requirement)	0	250 notices	250 responses	0	10 minutes	0	42 hours	42 hours
232.219 – Double heading and helper service: Testing/calibration/records of Helper Link devices used by locomotives (New Requirement)	0	100 records	100 responses	0	5 minutes	0	8 hours	8 hours
	1,350 documentation of calibration records	17,000 records	15,650 responses	1 minute	2 minutes	23 hours	567 hours	544 hours

<sup>9</sup> Based on this final rule, the estimated number of submissions have been revised because of the expected decrease in Class I (freight) brake tests.

---(f)(2) Annual report to FRA on radios found with frequency drift (New requirement)	0	1 report	1 response	0	12 hours	0	12 hours	12 hours
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**Program changes** listed above decreased the burden by 14,851 hours and 1,246,109 responses.

**TABLE FOR ADJUSTMENTS**

CFR Section	Total Annual Responses			Average Time per Response		Total Annual Burden Hours			Section analyses and estimates
	Current submission	Requesting submission	Difference (plus/minus)	Current submission	Requesting submission	Current	Requesting submission	Difference (plus/minus)	
229.27 - Annual tests	120,000 records of tests	30,000 records of tests	-90,000 responses	15 minutes	30 seconds	30,000 hours	250 hours	-29,750 hours	The reduction is due to review of estimated number of submissions expected to be received and estimated time to complete a submission. FRA estimates 30,000 load meters will be tested annually instead of quarterly as previously submitted. Additionally, based on FRA's interpretation of the PRA's implementing regulations, specifically the definition of "information" within 5 C.F.R. § 1320.3(h), FRA considers training/testing to be an excepted category of information under the PRA. FRA however recognizes recordkeeping should be included. Thus, the amount of time per submission has been adjusted accordingly.
232.7 - Waivers	10 petitions	2 petitions	-8 responses	160 hours	160 hours	1,600 hours	320 hours	-1,280 hours	The reduction is due to review of estimated number of submissions expected to be received. FRA

<sup>10</sup> Based on this rule, the estimated number of submissions have been revised because FRA estimates there will be increased air pressure sensory test. The amount of time per recording of this test was increased from 1 minute to 2 minutes because it takes longer to record this test.



									estimates 2 petitions will be received on annual basis because of the codification of many existing waivers.
232.17 - (d)(2)(ii) Statement of interest	4 statements	4 statements	0	8 hours	15 minutes	32 hours	1 hour	-31 hours	The reduction is due to review of estimated time to complete a submission. The amount of time per drafting a statement was reduced from 8 hours to 15 minutes because FRA had previously overestimated the burden.
-(f) Comment	13 comments	6 comments	-7 responses	4 hours	4 hours	52 hours	24 hours	-28 hours	The reduction is due to review of estimated number of submissions expected to be received. FRA estimates 6 comments will be received on an annual basis due to the decreased waivers expected to be received.
232.103 - Securement job briefings	23,400,000 securement job briefings	0	-23,400,000 responses	30 seconds	0	195,000 hours	0	-195,000 hours	This is a continuous and usual and customary practice for railroads. Consequently, there is no burden associated with this requirement.
232.105 – General requirements for locomotives: Inspection	30,000 forms	0	-30,000 responses	5 minutes	0	2,500 hours	0	-2,500 hours	The burden for this requirement is included under OMB Control Number § 229.23.
–(h) RR Inspection of locomotive exterior locking mechanism /records	30,000 insp./records	0	-30,000 responses	30 seconds	0	250 hours	0	-250 hours	The burden for this requirement is included under OMB Control Number § 229.23.
-- RR Repair, where necessary, of locomotive exterior locking mechanism	73 repairs/repairs	0	-73 responses	60.25 minutes	0	73 hours	0	-73 hours	The burden for this requirement is included under OMB Control Number § 229.23.
232.107 - Recordkeeping	1,150 records	1,150 records	0	20 hours	10 minutes	23,000 hours	192 hours	-22,808 hours	The reduction is due to review of estimated time to complete a submission. The amount of time per recordkeeping was reduced from 20 hours to 10 minutes because FRA had previously overestimated the burden by including non-PRA related tasks, such as inspection time.

232.111 - Report requirements to train crew	2,112,000 reports	2,112,000 reports	0	10 minutes	5 minutes	352,000 hours	176,000 hours	-176,000 hours	The reduction is due to review of estimated time to complete a submission. The amount of time per recordkeeping was reduced from 10 minutes to 5 minutes because FRA had previously overestimated the burden by including hazardous material notifications which are accounted for under Part 170 series.
232.203 - Amendments to written program	695 revisions	236 revisions	-459 responses	8 hours	8 hours	5,560 hours	1,888 hours	-3,672 hours	The reduction is due to review of estimated number of submissions expected to be received. FRA estimates 236 revisions will be received on an annual basis. Additionally, the number of records and notices associated with the revised amendments have been reduced accordingly.
-Training records	67,000 records	24,781 records	-42,219 responses	8 minutes	8 minutes	8,933 hours	3,304 hours	-5,629 hours	
- Training notifications	67,000 notices	24,781 notices	-42,219 responses	3 minutes	1 minute	3,350 hours	413 hours	-2,937 hours	
- Efficiency test plans	696 plans + copies	708 copies	12 responses	40 hours + 1 minute	1 minute	52 hours	12 hours	-40 hours	The reduction in burden hours is due to changes in number of test plans—from one (1) to zero test plans annually. This requirement has been fulfilled.
- Amendments to validation/assessment program	50 revisions	0	-50 responses	20 hours	hours	1,000 hours	0	-1,000 hours	FRA estimates that it will receive zero amendments annually. This requirement has been fulfilled.
232.303 - Last repair track brake test/single car test – Stenciled on Side of Equipment	240,000 markings	240,000 markings	0	5 minutes	2 minutes	20,000 hours	8,000 hours	-12,000 hours	The reduction is due to review of estimated time to complete a submission. The amount of time per recordkeeping was reduced from 5 minutes to 2 minutes because railroads are using Radio Frequency Identification technology as opposed to stenciling on the car.
232.305 - Single Car Tests – Performance and Records	240,000 tests/records	0	-240,000 responses	60 minutes	0	240,000 hours	0	-240,000 hours	The burden for this requirement is included under OMB Control Number § 229.303.
232.307 - Comments on Modification Request	2 comments	0	-2 responses	8 hours	0	16 hours	0	-16 hours	FRA estimates that it will receive zero comments annually.

									Normally, FRA receives one (1) comment every five years.
232.309 - Repair track brake test equipment and devices used to perform single car air brake tests - Periodic calibration of devices	5,000 tests	5,000 records of calibrations	0	30 minutes	2 minutes	2,500 hours	167 hours	-2,333 hours	Based on FRA's interpretation of the PRA's implementing regulations, specifically the definition of "information" within 5 C.F.R. § 1320.3(h), FRA considers training/testing to be an excepted category of information under the PRA. FRA however recognizes recordkeeping should be included. Thus, the amount of time per submission has been adjusted accordingly.
232.407 – EOT Operations requiring 2-way Voice Radio Communications	50,000 verbal comments	0 verbal comments	-50,000 responses	30 seconds	30 seconds	417 hours	0	-417 hours	The burden for this requirement is included under OMB Control Number § 229.409.
232.603 - Configuration Management Plans (ECP) - Subsequent Years	1 plan	0	-1 response	60 hours	0	60 hours	0	-60 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Request for Modification of Standards and Extra Copies to FRA	3 requests + copies	0	-3 responses	8 hours + 5 minutes	0	8 hours	0	-8 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Affirmative Statements that RRs have served copies of Modification Request to Employee Representatives	28 statements + copies	0	-28 responses	60 minutes + 5 minutes	0	6 hours	0	-6 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Comments on	4 comments	0	-4 responses	2 hours	0	8 hours	0	-8 hours	While several railroads have

requested modification									operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
232.605 - ECP Brakes Training of Employees – First Year	1,602 inspectors	0	-1,602 responses	8 hours + 24 hours	0	26,480 hours	0	-26,480 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- ECP Brakes Training of Employees – Subsequent Years	1,602 inspectors	0	-1,602 responses	1 hour + 8 hours	0	7,580 hours	0	-7,580 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
232.605 - ECP Training Records -Yr. One	1,602 records	0	-1,602 responses	8 minutes	0	214 hours	0	-214 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- ECP Training Records - Subsequent Yrs.	1,602 records	0	-1,602 responses	4 minutes	0	107 hours	0	-107 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Assessment of ECP Training Plan	1 ECP	0	-1 response	40 hours	0	40 hours	0	-40 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are

									operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Adopt Operating Rules for ECP Brakes	1 operation rule	0	-1 response	24 hours	0	24 hours	0	-24 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Amended Locomotive Engineer Certification Program (ECP Brakes)	1 amended	0	-1 response	40 hours	0	40 hours	0	-40 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
232.607 - ECP Inspection and Testing - - Initial Terminal - Inspections and Notification/Record of Class I Brake Tests	1,500 insp.+ notices	0	-1,500 responses	90 minutes + 45 seconds	0	1,134 hours	0	-1,134 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Cars added or removed en route - Class I Brake Test and Notification	75 insp./tags/records	0	-75 responses	60 minutes + 45 seconds	0	50 hours	0	-50 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Non-ECP cars added to ECP Trains - Inspections and Tags for Defective Cars	75 insp.+ notices	0	-75 responses	5 minutes + 2.5 minutes	0	4 hours	0	-4 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this

									requirement at this time.
232.609 - Handling of Defective Equipment with ECP Brake Systems — Freight Car w /defective conventional brakes moved in train operating in ECP brake mode	50 tags/records	0	-50 responses	3 minutes	0	2 hours	0	-2 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Inspections/Tagging for train moving in ECP brake mode w/less than 85 percent operative/effective brakes	30 insp./records	0	-30 responses	5 minutes + 2.5 minutes	0	2 hours	0	-2 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Freight cars equipped with ECP brake system moving in ECP brake mode found with ineffective or inoperative brake hauled/tagged in accordance with Section 232.15	50 tags/records	0	-50 responses	3 minutes	0	2 hours	0	-2 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Train operating w/conventional pneumatic brakes operating w/freight cars equipped with stand alone ECP brake system: Tagging stand-alone ECP brake equipped cars in accordance w/section 232.15	50 tags/records	0	-50 responses	3 minutes	0	2 hours	0	-2 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Procedures for handling ECP brake system repairs and designation of repair locations	1 procedure	0	-1 response	24 hours	0	24 hours	0	-24 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes.

									Consequently, there will be no burden associated with this requirement at this time.
- List of repair locations	1 list	0	-1 response	8 hours	0	8 hours	0	-8 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Notification to FRA Safety Administrator regarding change to repair location list	1 notification	0	-1 response	1 hour	0	1 hour	0	-1 hour	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
232.611 - Periodic Maintenance - - Inspections before being released from repair Shop	300 insp./rcds	0	-300 responses	10 minutes	0	50 hours	0	-50 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Procedures/Petition for ECP Single Car Test	3 petitions + copies	0	-3 responses	24 hours + 5 minutes	0	24 hours	0	-24 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
- Single Car Air Brake Tests – Records	50 tests/records	0	-50 responses	45 minutes	0	38 hours	0	-38 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.

- Modification of Single Car Test Standards	1 revised single car test procedure	0	-1 response	40 hours	0	40 hours	0	-40 hours	While several railroads have operated ECP freight brake technologies since 2008, at this time no U.S. railroads are operating ECP brakes. Consequently, there will be no burden associated with this requirement at this time.
232.717(c) – Freight and passenger train car brakes – Written maintenance plan (formerly under appendix B, recodifies subpart H)	0	40 written plans	40 responses	0	6 hours	0	240 hours	240 hours	FRA estimates it will receive 40 plans annually under this requirement.

**Adjustments** above decreased the number of burden hours by 731,712 hours and 23,933,658 responses. There is no change in the costs to respondents.



**16. Publication of results of data collection.**

There are no plans for publication regarding this information collection.

**17. Approval for not displaying the expiration date for OMB approval.**

Once OMB approval is received, FRA will publish the approval number for these information collection requirements in the Federal Register.

**18. Exception to certification statement.**

No exceptions are taken at this time.