

**SUPPORTING JUSTIFICATION  
RAILROAD OPERATING RULES (49 CFR 217) (49 CFR 218)**

**OMB No. 2130-0035  
; RIN 2130-AC51**

Summary of Submission

- This is a revision to the above last approved information collection submission cleared by OMB on **February 23, 2018**, which expires on **February 28, 2021**.
- FRA is publishing a Notice of Proposed Rulemaking titled Locomotive Image and Recording Devices for Passenger Trains in the **Federal Register** on July 24, 2019. See 84 FR 35712.
- Total number of burden **hours requested** for this submission is **210,915 hours**.
- The total number of burden **hours previously approved** was **4,791,614 hours**.
- The total burden has decreased by **4,580,699 hours** from the last submission.
- Total number of **responses requested** for this submission is **9,240,241**.
- Total number of **responses previously approved** for this submission was **188,591,224**.
- The total number of **responses** has decreased by **179,350,983** from the last submission.
- **Program changes** increased the burden by **54,888 hours** and increased the number of **responses** by **8,514**.
- **Adjustments** decreased the total burden **4,635,587 hours**, and decreased total **responses** by **179,359,497** from the last approved submission.
- \*\*The answer to question **number 12** itemizes the hourly burden associated with each requirement of this rule (See pp. 28-68).
- \*\*\*The answer to question **number 15** itemizes all program changes and adjustments (See pp. 72-75).

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

On February 16, 1996, a Maryland Rail Commuter (MARC) passenger train collided with a National Railroad Passenger Corporation (Amtrak) passenger train near Silver Spring, Maryland. Eleven people were killed and 26 people were injured as a result of the accident. The accident occurred when MARC train 286 was delayed in block for a station stop while operating on an “approach” signal indication requiring the train to approach the next signal prepared to stop. However, MARC train 286 proceeded after making the station stop as if operating on a “clear” signal indication, could not stop for the subsequent “stop” signal, and collided with Amtrak train 3 at Georgetown Junction. The NTSB found that the probable cause of the accident was, in part, “the apparent failure of the [MARC] engineer and the train crew because of multiple distractions to operate MARC train 286 according to signal indications . . . .”<sup>1</sup>

As a result of this accident, the NTSB made recommendation R-97-009 to FRA, recommending that FRA amend 49 CFR part 229 to “require the recording of train crewmembers’ voice communications for exclusive use in accident investigations and with appropriate limitations on the public release of such recordings.”<sup>2</sup> In making the recommendation, NTSB stated that during its investigation, it could not document crew communications regarding signal indications as the train approached the location where the accident occurred and that locomotive event recorders cannot answer questions about a train crew’s knowledge or actions during accident investigations. NTSB pointed to the long history of cockpit voice recorders (CVR) in the aviation industry, as mandated by the Federal Aviation Administration (FAA) in certain commercial aviation operations since 1964.<sup>3</sup> The NTSB explained that the use of CVRs had been useful during aviation accident investigations and were “an almost necessary tool in documenting the operational decisions or mistakes of the crew that lead up to an accident.”<sup>4</sup>

NTSB reiterated its recommendation after a January 1999 collision near Bryan, Ohio, involving three Consolidated Rail Corporation (Conrail) freight trains. The accident occurred when westbound Conrail train Mail-9 was traveling 56 mph and struck the rear of a slower moving freight train ahead of it that was also traveling westbound. Both

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<sup>1</sup> National Transportation Safety Board, *Collision and Derailment of Maryland Rail Commuter MARC Train 286 and National Railroad Passenger Corporation Amtrak Train 29 Near Silver Spring, Maryland on February 16, 1996*. Railroad Accident Report NTSB/RAR-97/02 (July 3, 1997); available online at <http://www.nts.gov/investigations/AccidentReports/Reports/RAR9702.pdf>.

<sup>2</sup> National Transportation Safety Board, *Safety Recommendation R-97-009* (Aug. 28, 1997); available online at: [http://www.nts.gov/safety/safety-recs/recletters/R97\\_9\\_21.pdf](http://www.nts.gov/safety/safety-recs/recletters/R97_9_21.pdf).

<sup>3</sup> *Supra.* n. 3 at 51.

<sup>4</sup> *Supra.* n. 3 at 52.

trains derailed, with derailed equipment then striking and derailing a third freight train that was traveling the opposite (eastbound) direction on an adjacent main track.

The NTSB found that the probable cause of that accident was “the failure of the crew of train Mail-9 [striking train] to comply with restrictive signal indications while operating at or near maximum authorized speed in dense fog.”<sup>5</sup> Both crew members of the striking train in that incident were killed and NTSB concluded that recorded crew communications might have provided valuable clues in reconstructing the accident, which could have “possibly enabled the carrier, the railroad unions, and the Federal Railroad Administration to make systemic changes to prevent similar accidents from occurring.”<sup>6</sup> The NTSB report also cited new statutory authority, codified at 49 U.S.C. 114(d), that included provisions for the NTSB to protect such recordings from public disclosure during accident investigations.

FRA declined to implement NTSB Recommendation R-97-009. At that time, FRA agreed that crew recordings could be beneficial for some investigations, but conveyed its concerns to NTSB regarding implementation of the recommendation, which included the significant costs of such a requirement, the existing availability of locomotive event recorder data, competing regulatory priorities, and concern regarding the privacy and comfort of train crews.<sup>7</sup> FRA stated the recommendation might warrant re-examination in the future, but requested that it be placed in the status of “Closed--Reconsidered.” NTSB ultimately classified the recommendation as “Closed-Unacceptable Action” in 2004.<sup>8</sup>

On July 10, 2005, two Canadian National Railway Company (CN) freight trains collided near Anding, Mississippi. The accident occurred in single-main track territory after the crew of a northbound CN train passed a stop signal without stopping and collided head-on with a southbound CN train. The crews of both trains were killed in the accident. The NTSB’s probable cause finding stated that the northbound train crew’s “attention to the signals was most likely reduced by fatigue; however, due to the lack of a locomotive cab voice recorder or the availability of other supporting evidence, other factors cannot be

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<sup>5</sup> National Transportation Safety Board, *Collision Involving Three Consolidated Rail Corporation Freight Trains Operating In Fog On a Double main Track Near Bryan, Ohio January 17, 1999*. Railroad Accident Report NTSB/RAR-01/01 (May 9, 2001); available online at: <http://www.nts.gov/investigations/AccidentReports/Reports/RAR0101.pdf>.

<sup>6</sup> *Id.* at 47.

<sup>7</sup> National Transportation Safety Board, *Safety Recommendation History for Safety Recommendation R-97-009*: available online at: [http://www.nts.gov/investigations/data/\\_layouts/nts.gov/recsearch/Recommendation.aspx?Rec=R-97-009](http://www.nts.gov/investigations/data/_layouts/nts.gov/recsearch/Recommendation.aspx?Rec=R-97-009).

<sup>8</sup> *Id.*

ruled out.”<sup>9</sup> The NTSB concluded that if a locomotive voice recorder had been installed on the controlling locomotive of the northbound train and survived the collision and resulting fire, that the recordings would “yield a better understanding of the cause of the accident and of the ways it might have been prevented.”<sup>10</sup> As a result, NTSB issued Safety Recommendation R-07-003, recommending that FRA require railroads to install on locomotives a crash and fire protected voice, or combined voice and video recorder, with the recordings only to be used for accident investigations.<sup>11</sup> The NTSB referenced several other accidents<sup>12</sup> in making this recommendation in which it believed locomotive video recordings would have been useful in investigating the accidents.

FRA responded to this NTSB recommendation, stating FRA had broached the subject of the NTSB’s recommendation regarding voice recorders on two occasions with the RSAC in 2007 without resolution, and planned to discuss the recommendation again at a future RSAC meeting.<sup>13</sup> FRA’s response also noted technical concerns with implementing the NTSB recommendation, and discussed its previously-raised privacy and cost-related concerns.<sup>14</sup> A later NTSB response noted that FRA had indeed discussed the recommendation at a November 2007 RSAC Locomotive Working Group meeting, and classified FRA’s response to the recommendation as “Open – Acceptable Response.” However, Recommendation R-07-003 was ultimately classified by NTSB as “Closed – Unacceptable Action/Superseded,” on February 23, 2010, after adoption of the report addressing the September 12, 2008, Metrolink accident in Chatsworth, California.<sup>15</sup>

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<sup>9</sup> National Transportation Safety Board, *Collision of Two CN Freight Trains Anding, Mississippi July 10, 2005*, Railroad Accident Report NTSB/RAR-07/01 (Mar. 20, 2007); available online at: <http://www.nts.gov/investigations/AccidentReports/Reports/RAR0701.pdf>.

<sup>10</sup> *Id.*

<sup>11</sup> National Transportation Safety Board, *Safety Recommendation R-07-003* (Apr. 25, 2007); available online at: [http://www.nts.gov/safety/safety-recs/reclatters/R07\\_1\\_3.pdf](http://www.nts.gov/safety/safety-recs/reclatters/R07_1_3.pdf).

<sup>12</sup> *See, e.g.*, National Transportation Safety Board, *Collision Between Two BNSF Railway Company Freight Trains Near Gunter, Texas, May 19, 2004*, Railroad Accident Report NTSB/RAR-06/02 (June 13, 2006); National Transportation Safety Board, *Collision of Union Pacific Railroad Train MHOTU-23 With BNSF Railway Company Train MEAP-TUL-126-D With Subsequent Derailment and Hazardous Materials Release, Macdona, Texas, June 28, 2004*, Railroad Accident Report NTSB/RAR-06/03 (July 7, 2006); National Transportation Safety Board, *Collision of Two Union Pacific Railroad Freight Trains, Texarkana, Arkansas, October 15, 2005*, Railroad Accident Brief NTSB/RAB-06/04 (Oct. 17, 2006).

<sup>13</sup> National Transportation Safety Board, *Safety Recommendation History for Safety Recommendation R-07-003*: available online at: [http://www.nts.gov/\\_layouts/nts.recsearch/Recommendation.aspx?Rec=R-07-003](http://www.nts.gov/_layouts/nts.recsearch/Recommendation.aspx?Rec=R-07-003).

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

On September 12, 2008, in Chatsworth, California, a collision occurred between a Southern California Regional Rail Authority (Metrolink) passenger train and a Union Pacific Railroad Company (UP) freight train,<sup>16</sup> after the locomotive engineer operating the Metrolink passenger train failed to stop his train for a stop signal. As a result of the accident, 25 persons on the Metrolink train were killed and 102 injured passengers were transported to the hospital. Property damage was estimated to be in excess of \$12 million. The NTSB found the probable cause of that accident was the Metrolink locomotive engineer's distraction due to the use of a personal cell phone to send text messages resulting in a failure to comply with the signal indication.<sup>17</sup>

Shortly after the Metrolink accident, the Rail Safety Improvement Act of 2008<sup>18</sup> (RSIA) was enacted and mandated, among other items, that railroads install PTC systems. Also after the accident, FRA issued its Emergency Order No. 26 (EO 26). 73 FR 58702 (Oct. 7, 2008). EO 26 prohibited railroad operating employees (typically train crew members such as locomotive engineers and conductors) performing safety-related duties from using or turning on electronic devices such as personal cell phones. The requirements in EO 26 were codified in amended form at 49 CFR part 220, subpart C, in an FRA final rule published on September 27, 2010, which took effect on March 28, 2011. 75 FR 59580. Among other requirements in the final rule, railroad operating employees are required to receive training on the regulation's requirements governing the use of electronic devices while on-duty and are also required to be tested by railroad supervisors to determine employees' compliance with such requirements. 49 CFR 220.313-315.

The NTSB's report on the Chatsworth accident resulted in two new Safety Recommendations, R-10-01 and R-10-02.<sup>19</sup> Safety Recommendation R-10-01 superseded Safety Recommendation R-07-003, and recommended that FRA:

Require the installation, in all controlling locomotive cabs and cab car operating compartments, of crash- and fire-protected inward- and outward-facing audio and image recorders capable of providing recordings to verify that train crew actions are in accordance with rules and procedures that are essential to safety as well as train operating conditions. The devices should have a minimum 12-hour continuous recording capability with recordings that are easily accessible for review, with appropriate limitations on public release, for the investigation of accidents or for use by management in carrying out efficiency testing and systemwide performance monitoring programs.

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<sup>16</sup> See National Transportation Safety Board, *Collision of Metrolink Train 111 with Union Pacific Train LOF65-12 Chatsworth, California September 12, 2008*, Accident Report NTSB/RAR-10/01 (Jan. 21, 2010); available online at: <http://www.nts.gov/investigations/AccidentReports/Reports/RAR1001.pdf>.

<sup>17</sup> *Id.* at 66.

<sup>18</sup> Rail Safety Improvement Act of 2008, Public Law No. 110-432, Division A, 122 Stat. 4848 (Oct. 16, 2008); available online at <https://www.fra.dot.gov/eLib/Details/L03588>.

<sup>19</sup> National Transportation Safety Board, *Safety Recommendations R-10-01 and R-10-02* (Feb. 23, 2010); available online at: <http://www.nts.gov/safety/safety-recs/reletters/R-10-001-002.pdf>.

In addition, Safety Recommendation R-10-02 recommended that FRA:

Require that railroads regularly review and use in-cab audio and image recordings (with appropriate limitations on public release), in conjunction with other performance data, to verify that train crew actions are in accordance with rules and procedures that are essential to safety. The NTSB's recommendations in response to the Chatsworth accidents differed from its previous recommendations regarding locomotive recording devices. FRA believes the prior recommendations were primarily made intending that locomotive recordings would be used as a post-accident investigation tool with the goal of gaining insight into accident causes to appropriately direct safety recommendations to prevent future similar accidents from occurring. Recommendations R-10-01 and 10-02 shared those same goals, but also recommended that FRA require regular railroad review of recordings be part of railroad's operational (efficiency) testing program as a proactive accident prevention tool to gauge employee compliance with applicable rules. Under existing 49 CFR 217.9, railroads are required to have an operational testing program to gauge employee compliance with relevant operating rules, timetables, and special instructions. Under the NTSB's recommendations, FRA would also require railroads to review locomotive image and audio recordings to conduct such operational tests.

In issuing these new recommendations, the NTSB's report on the Chatsworth accident explained that the engineer on the Metrolink train who caused the accident knowingly violated railroad rules regarding the use of personal electronic devices while operating his train.<sup>20</sup> The NTSB explained that in the relative privacy of the locomotive cab, the locomotive engineer of the Metrolink train (as is the case with most train operations in this country) was free to use his personal cell phone without any possibility of being caught, except when a railroad manager might physically be in or near the cab of the locomotive.<sup>21</sup> However, NTSB posited that if the engineer had known he was being recorded, and railroad supervisors would regularly review the recordings, such rules' violations would have been deterred.<sup>22</sup>

On Tuesday, May 12, 2015, Amtrak passenger train 188 (Train 188) was traveling from Washington, D.C., to New York City. Aboard the train were five crew members and approximately 238 passengers. Shortly after 9:20 p.m., the train derailed while traveling through a curve in the track at Frankford Junction in Philadelphia, Pennsylvania. As a result of the accident, eight persons were killed and a significant number of persons were seriously injured. The accident was investigated by NTSB, which took the lead role conducting the investigation of this accident under its legal authority. 49 U.S.C. 1101 et

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<sup>20</sup> Supra n. 18 at 55.

<sup>21</sup> Id. at 57.

<sup>22</sup> Id. at 58.

seq.; 49 CFR 831.2(b). As is customary, FRA participated in the NTSB's investigation and also investigating the accident under its own statutory authority.

Both NTSB's<sup>23</sup> and FRA's<sup>24</sup> accident investigations concluded that excessive train speed was the cause of the accident. As Train 188 approached the curve from the west, it traveled over a straightaway with a maximum authorized passenger train speed of 80 mph. The maximum authorized passenger train speed for the curve was 50 mph. NTSB determined the train was traveling approximately 106 mph within the curve's 50-mph speed restriction, exceeding the maximum authorized speed on the straightaway by 26 mph and on the curve by 56 mph.<sup>25</sup> NTSB has also indicated the locomotive engineer operating the train made an emergency application of Train 188's air brake system, and the train slowed to approximately 102 mph before derailling in the curve.

On July 8, 2015, NTSB sent a letter to FRA reiterating NTSB recommendations R-10-01 & -02.<sup>26</sup> NTSB's letter to FRA explained the engineer of Amtrak 188 stated he could not recall the events leading up to the derailment, and that investigators have been unable to determine information about the engineer's behavior in the moments leading up to the accident.<sup>27</sup> The letter indicated NTSB believes inward-facing locomotive recorders could have provided valuable information to help determine the cause of the accident. In sum, given that information on the actions of the engineer before the accident was lacking, there are potentially critical pieces of information missing about the cause of this accident that resulted in the deaths of eight people. After this accident occurred, Amtrak announced it would install inward-facing cameras on all of its ACS-64 locomotives on the Northeast Corridor.

The NTSB reiterated Safety Recommendations 10-01 & 10-02 in response to other railroad accidents at Red Oak, Iowa;<sup>28</sup> Two Harbors, Minnesota;<sup>29</sup> Chafee, Missouri;<sup>30</sup>

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<sup>23</sup> National Transportation Safety Board, *Derailment of Amtrak Passenger Train 188, Philadelphia, Pennsylvania, May 12, 2015*. NTSB Accident Report NTSB/RAR-16/02 (May 17, 2016); available online at: <https://www.nts.gov/investigations/AccidentReports/Reports/RAR1602.pdf>.

<sup>24</sup> Federal Railroad Administration, *Accident Investigation Report HQ-2015-1052, Amtrak (ATK), Philadelphia, PA, May 12, 2015*; available online at: [https://www.fra.dot.gov/eLib/details/L18424#p1\\_z50\\_gD\\_IAC](https://www.fra.dot.gov/eLib/details/L18424#p1_z50_gD_IAC).

<sup>25</sup> FRA regulations provide, in part, that it is unlawful to "[o]perate a train or locomotive at a speed which exceeds the maximum authorized limit by at least 10 miles per hour." 49 CFR 240.305(a)(2).

<sup>26</sup> National Transportation Safety Board, *Safety Recommendation History for Safety Recommendation R-10-001*: available online at: [http://www.nts.gov/\\_layouts/nts.recsearch/Recommendation.aspx?Rec=R-10-001](http://www.nts.gov/_layouts/nts.recsearch/Recommendation.aspx?Rec=R-10-001). NTSB also sent a letter regarding locomotive recorder recommendations to Amtrak.

<sup>27</sup> However, the NTSB's analysis of the engineer's phone records does not indicate that any calls, texts, or data usage occurred during the time the engineer was operating the train. National Transportation Safety Board, *Second Update on its Investigation into the Amtrak Derailment in Philadelphia* (June 10, 2015); available online at: <http://www.nts.gov/news/press-releases/Pages/PR20150610.aspx>.

and Goodwell, Oklahoma<sup>31</sup> respectively. The NTSB has also made similar recommendations to railroads regarding the installation and use of locomotive image and audio recording devices (see, e.g., NTSB Safety Recommendations R-14-08 & -09<sup>32</sup> to the Metro-North Railroad after the December 2013 accident near Spuyten Duyvil Station in Bronx, New York, in which four Metro-North passengers were killed). These accidents all appear to involve human factor causes, but absent locomotive recordings there is a lack of information regarding the crew actions leading up the accidents.

For example, in the 2011 Red Oak, Iowa, accident, a BNSF Railway Company (BNSF) freight train crew failed to operate their train at restricted speed as required by signal indication, and collided with the rear end of a standing train. Both crew members of the striking train were killed. The NTSB's probable cause determination indicated the cause of the accident was fatigue-related.<sup>33</sup> However, the NTSB noted that without visual evidence of the crewmembers' actions while operating the striking train, valuable information about their performance was not available to accident investigators (a forward-facing video recording from the striking train did not survive the collision and subsequent fire).<sup>34</sup> The NTSB's report stated that a video recording's value in preventing future accidents "cannot be overstated," as installation of such cameras could assist in monitoring compliance with railroads' rules and identifying fatigued locomotive engineers, such that intervention might happen before an accident occurs.<sup>35</sup>

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<sup>28</sup> National Transportation Safety Board, *Collision of BNSF Coal Train with Rear End of Standing BNSF Maintenance-of-Way Equipment Train, Red Oak, Iowa April 17, 2011*, NTSB Accident Report NTSB/RAR-12/02 (Apr. 24, 2012); available online at: <http://www.nts.gov/investigations/AccidentReports/Reports/RAR1202.pdf>.

<sup>29</sup> National Transportation Safety Board, *Collision of two Canadian National Railway Freight Trains near Two Harbors, Minnesota, September 30, 2010*. NTSB Accident Report NTSB/RAR-13/01/SUM (Feb. 12, 2013); available online at: <http://www.nts.gov/investigations/AccidentReports/Reports/RAR1301.pdf>.

<sup>30</sup> National Transportation Safety Board, *Collision of Union Pacific Railroad Freight Train with BNSF Railway Freight Train near Chaffee, Missouri, May 25, 2013*. NTSB Accident Report NTSB/RAR-14/02 (Nov. 17, 2014); available online at: <http://www.nts.gov/investigations/AccidentReports/Reports/RAR1402.pdf>.

<sup>31</sup> National Transportation Safety Board, *Collision of Two Union Pacific Railroad Freight Trains near Goodwell, Oklahoma, June 24, 2013*. NTSB Accident Report NTSB/RAR-13/02 (June 18, 2013); available online at: <http://www.nts.gov/investigations/AccidentReports/Reports/RAR1302.pdf>.

<sup>32</sup> National Transportation Safety Board, *Safety Recommendations R-14-07 & R-14-08* (Feb. 18, 2014); available online at: <http://www.nts.gov/safety/safety-recs/reletters/R-14-007-009.pdf>.

<sup>33</sup> *Supra* n.29 at 72.

<sup>34</sup> *Id.* at 67.

<sup>35</sup> *Id.* at 66.



The NTSB similarly discussed inward-facing cameras in its report on the 2012 Goodwell,, Oklahoma accident, which occurred when a UP crew failed to comply with wayside signal indications and were killed in a subsequent collision with another freight train.<sup>36</sup> The NTSB indicated that causal factors included the locomotive engineer’s apparent vision problems and the conductor’s disengagement from his duties.<sup>37</sup> However, NTSB stated that an inward-facing locomotive video recording could have “shed light on the activities of the [crew] leading up to the collision and why the crew did not respond to wayside signals.”<sup>38</sup>

FRA has similarly identified the value of inward-facing image recordings for other recent accidents not listed above that might provide the only means of conclusively determining what caused or contributed to an accident, and, more importantly, to develop necessary corrective actions to prevent similar train accidents from occurring. For example, a 2013 accident near Amarillo, Texas<sup>39</sup> and a 2011 accident near Mineral Springs, North Carolina,<sup>40</sup> both occurred after train crews qualified on the physical characteristics of the territory operated their trains significant distances past dark signals without taking any action to slow or stop their trains. In fact, the striking train in the Mineral Springs accident increased train speed from 31 mph to 48 mph after passing the dark signal. The crewmembers in the Mineral Springs accident were killed in the collision, and the crewmembers in the Amarillo accident were, in FRA’s view, unable to definitively articulate reasons why they did not operate their train in compliance with applicable railroad rules. The NTSB found that the probable cause of both accidents involved the crews’ failure to comply with applicable rules governing train speeds upon encountering dark signals. Inward-facing image recordings would have provided visual information about crew actions and performance leading up to these accidents, enabling railroads and investigators to accurately determine the root cause of the accidents. Without such recordings, regulatory and industry efforts to learn about and ultimately prevent such incidents are inhibited.

The NTSB’s reiteration of Safety Recommendations R-10-01 & -02 in response to the 2010 Two Harbors, Minnesota, accident was related to the prohibited use of personal electronic devices by train crew members. In that accident, a CN train crew failed to

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<sup>36</sup> *Supra* n.32 at pp. 34-37.

<sup>37</sup> *Id.* at 44-45.

<sup>38</sup> *Id.* at. 35.

<sup>39</sup> National Transportation Safety Board, *Collision Involving Three BNSF Railway Freight Trains near Amarillo, Texas, September 25, 2013*. NTSB Accident Report NTSB/RAR-15/02 (June 25, 2015); available online at: <http://www.nts.gov/investigations/AccidentReports/Reports/RAR1502.pdf>.

<sup>40</sup> National Transportation Safety Board, *Railroad Accident Brief NTSB/RAB-13-01* (Jan. 29, 2013); available online at: <http://www.nts.gov/investigations/AccidentReports/Reports/RAB1301.pdf>.

properly comply with an after-arrival mandatory directive and struck another freight train traveling the opposite direction on single main track. The NTSB's investigation indicated that four of the five crewmembers on the two trains involved in the accident had used their personal cell phones while on-duty on the date of the accident contrary to applicable railroad rules and FRA's EO 26 discussed above.<sup>41</sup> The NTSB concluded the use of cell phones by crewmembers on both trains involved in the accident was a distraction to the safe operation of the trains,<sup>42</sup> and cited a list of past rail transportation accidents it had investigated where personal electronic device use by train crews was a causal factor.

Those accidents include the May 2004 accident near Gunter, Texas (cited above) where there was significant personal cell phone usage by crew members of both trains involved in the accident while the trains were being operated (accident resulting in the death of one train crewmember).<sup>43</sup> They also include a May 2002 accident involving two BNSF freight trains near Clarendon, Texas,<sup>44</sup> resulting in critical injuries to the crew of a coal train where the probable cause of the accident involved the locomotive engineer's use of a personal cell phone during a safety-critical time period. Finally, the report cited a May 2009 accident involving two Massachusetts Bay Transportation Authority light rail passenger trains (not subject to FRA's jurisdiction) in Boston, Massachusetts, stemming from the train operator's use of a phone to send text messages resulting in injuries to 68 persons.<sup>45</sup>

The NTSB's discussion in the Two Harbors report about the train crews' prohibited personal cell phone use was in the context of the value of locomotive recording devices and other technologies as a tool to deter the unsafe act of the use of personal electronic devices by train crews.<sup>46</sup> The NTSB indicated that additional measures were necessary (such as recording devices and cell phone detectors) to combat what it described as a "pervasive safety hazard in the rail industry; that is, the unauthorized use of [personal

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<sup>41</sup> Supra n. 30 at 20.

<sup>42</sup> Id.

<sup>43</sup> Supra note 14 at p. 39.

<sup>44</sup> National Transportation Safety Board, *Collision of Two Burlington Northern Santa Fe Freight Trains Near Clarendon, Texas May 28, 2002*, Railroad Accident Report NTSB/RAR-03/01 (June 3, 2003); available online at: <http://www.nts.gov/investigations/AccidentReports/Reports/RAR0301.pdf>.

<sup>45</sup> National Transportation Safety Board, *Collision of Two Massachusetts Bay Transportation Authority Light Rail Passenger Trains, Boston, Massachusetts, May 8, 2009*, Railroad Accident Brief NTSB/RAB-11/06 (Apr. 13, 2011); available online at: <http://www.nts.gov/investigations/AccidentReports/Reports/RAB1106.pdf>. Though not subject to FRA's jurisdiction because it involved a transit train, this accident was notable in that it was caused by a train operator's failure to respond to signal indication because he was text messaging on a personal electronic device.

<sup>46</sup> Supra note 30 at 23-24.

electronic devices (PEDs)] by on-duty crewmembers is too difficult to prevent by rules, policies, and punitive consequences.”<sup>47</sup>

In addition to the serious railroad accidents described above that involved the unauthorized use of personal electronic devices to varying degrees of severity, FRA has investigated several other railroad accidents or violations of Federal railroad safety regulations related to the unauthorized use of personal electronic devices by on-duty railroad employees. These incidents primarily involve the use of personal cell phones.

Despite Federal prohibitions on the use of personal electronic devices that have been in place for several years and required training and testing for all railroad operating employees under §§ 220.313-315, railroad incidents involving the prohibited use of personal electronic devices that endanger the lives of the public and railroad employees continue to occur. Recently, FRA investigated a troubling incident where a passenger railroad showed FRA a video recording of one of its locomotive engineers who appeared to be using his personal cell phone while operating a passenger train occupied by over 400 passengers. The results of an investigatory subpoena indicate the engineer appeared to routinely use his personal cell phone in violation of the prohibitions in 49 CFR part 220 while operating passenger trains.

FRA is currently investigating other incidents where personal electronic device use and train crew distraction may be at issue. FRA will take enforcement action if appropriate to address violations of Federal regulations governing the use of personal electronic devices during safety-critical periods of time. However, FRA believes the proactive use of locomotive recordings to perform operational tests (i.e., to monitor compliance with Federal regulations and railroad rules prohibiting the use of personal electronic devices) and investigate incidents or complaints of noncompliance of which railroads become aware, will be a valuable tool to prevent such safety violations that endanger the lives of the public, other railroad employees, and the environment. Railroad operating employees often perform a significant portion of their duties in the confines of locomotives and/or rail cars or in remote locations. As noted by NTSB, these locations are often not in the physical vicinity of, or in locations easily observed by, railroad supervisors. As such, compliance with Federal regulations and railroad rules governing the use of electronic devices is difficult to determine and is often based on an honor system. Inward-facing video recordings provide railroad supervisors and safety investigators the most realistic method to determine operating employee compliance with FRA and railroad prohibitions on the use of distracting personal electronic devices while operating trains and performing other safety-sensitive duties. FRA is aware that railroads which have installed in-cab cameras have detected instances of prohibited use of personal electronic device use by operating crew members.

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<sup>47</sup> Id. at 24.

On December 4, 2015, President Obama signed into law the Fixing America's Surface Transportation Act, Pub. L. 114-94, 129 Stat. 1686 (Dec. 4, 2015) (FAST Act). Section 11411 of the FAST Act, codified in the Federal railroad safety laws at 49 U.S.C. 20168 (the Statute), requires FRA (as the Secretary of Transportation's delegate) to promulgate regulations requiring each railroad carrier that provides regularly scheduled intercity rail passenger or commuter rail passenger transportation to the public to install inward- and outward-facing image recording devices in all controlling locomotives of passenger trains. This NPRM proposes to implement the FAST Act requirements regarding such recording devices.

FRA is also publishing this proposed rule under the agency's general railroad safety rulemaking authority at 49 U.S.C. 20103. The former Federal Railroad Safety Act of 1970, as codified at 49 U.S.C. 20103, provides that "[t]he Secretary of Transportation, as necessary, shall prescribe regulations and issue orders for every area of railroad safety supplementing laws and regulations in effect on October 16, 1970." The Secretary's responsibility under these statutory provisions, and the balance of the railroad safety laws, is delegated to the Federal Railroad Administrator. 49 CFR 1.89.

Before the FAST Act was enacted, FRA announced at a May 2015 meeting of the Railroad Safety Advisory Committee (RSAC) it intended to draft an NPRM that would propose the installation of locomotive recording devices in both freight and passenger train locomotives. In 2014, the RSAC had accepted a task from FRA to address National Transportation Safety Board (NTSB) Safety Recommendations R-10-01 & -02 on locomotive-mounted recording devices (RSAC Task No. 14-01). The RSAC established the Recording Devices Working Group (Working Group) to recommend specific actions regarding the installation and use of locomotive-mounted recording devices, such as inward- and outward-facing video and audio recorders. The RSAC did not vote, or reach consensus, on any recommendations to FRA regarding the adoption of regulatory text addressing locomotive-mounted video and audio recording devices.

In light of the FAST Act mandate, relevant NTSB recommendations, the RSAC Working Group's discussions, and recent accidents and other railroad safety violations that FRA has investigated and is investigating, this NPRM proposes to require the installation and use of inward- and outward-facing recording devices in all lead locomotives in passenger trains to improve railroad safety. The NPRM does not propose to require such recording devices in freight locomotives.

In sum then, FRA is proposing to require the installation of inward- and outward-facing locomotive image recording devices on all lead locomotives in passenger trains, and that these devices record while a lead locomotive is in motion and retain the data in a crashworthy memory module. FRA also proposes to treat locomotive-mounted recording devices on passenger locomotives as "safety devices" under existing Federal railroad safety regulations to prohibit tampering with or disabling them. Further, this NPRM would govern the use of passenger locomotive recordings to conduct operational tests to

determine passenger railroad operating employees' compliance with applicable railroad rules and Federal regulations. FRA requests comment on the need for and effects of potential, additional safety requirements.

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

The information to be collected under new § 229.136(a)(3) regarding the requirement that railroads must provide notice to crewmembers that they are in a locomotive equipped with recorders via a notation on the Form FRA F6180-49A will be used to alert railroad employees or anyone in the cab of an equipped locomotive that there is no expectation of privacy in the cab of the locomotives while performing duties for the railroad.

Notice to crewmembers or other occupants of the cab must also be provided via stencils, markings, or other signage inside the locomotive's cab that is clearly visible to the cab's occupants and which denotes the presence of image and audio recording devices. FRA notes that this proposal would also require notice if a locomotive is equipped with any audio recording devices, even if audio recording devices are not required in a final rule but a railroad has chosen to equip a locomotive with such devices.

Under new § 229.136(a)(4), image recording system must record at least the most recent 12 hours of operation of a locomotive. This proposal would also apply to any audio recordings if a railroad installs audio recording devices on a locomotive. The FAST Act requires a locomotive's image recording systems to have a minimum 12-hour continuous recording capability. This 12-hour minimum recording proposal is also consistent with NTSB Safety Recommendation R-10-01 discussed above. A 12-hour recording period would, in many instances, capture a train crew's entire tour during the time they perform duties under the hours of service laws. This information will be used by FRA and the NTSB in the event of an accident/incident and will provide invaluable assistance in determining the circumstances and causes of a particular accident/incident to prevent such accidents/incidents from reoccurring in the future. The NTSB itself has indicated that crew "actions or inactions at any time during that period could set the stage for an accident." Additionally, a minimum 12-hour recording period allows greater railroad flexibility to use recordings for randomly conducted operational testing, as they would not need to download recordings immediately at the end of a train crew's shift.

Under new § 229.136(f)(1), railroads would be required to adopt, maintain, and comply with a chain-of-custody procedure governing the handling and release of any locomotive image or audio recordings accessed by railroad personnel. In absence of an accident where NTSB or FRA has taken possession of a locomotive's recording devices, a railroad's internal policies govern the handling of locomotive audio and video recordings. The policies railroads establish under proposed subsection (f)(1) would govern the chain-of-custody for recordings, access to the recordings, and release of the recordings. The chain-of-custody procedure would have to specifically address the preservation and

handling requirements for post-accident/incident recordings provided to FRA or NTSB during accident investigations. Under this proposal, a railroad's failure to comply with its procedures would be a violation of the Federal railroad safety regulations.

Under new § 229.136(f)(2), FRA proposes that if any locomotive equipped with an image and/or audio recording system is involved in an accident/incident required to be reported to FRA under part 225 of this chapter, the railroad using the locomotive at the time of the accident must preserve the data recorded by each such device for one year for analysis by FRA or NTSB. FRA and NTSB investigators will want to closely examine such data.

This preservation requirement permits the railroad to extract and analyze recorded data, if the original downloaded data file, or an unanalyzed exact copy of it, is: (1) retained in secure custody under the railroad's procedures adopted under paragraph (f)(1) of this section, and (2) not utilized for analysis or any other purpose except by direction of FRA or NTSB. Subparagraph (f)(2)'s one-year retention requirement would fulfill the FAST Act's mandate that each railroad carrier subject to that Act's requirements preserve recording device data for one year after the date of a reportable accident or incident.

FRA notes that the proposed post-accident preservation requirement would apply to any recordings made on a locomotive equipped with image or audio recording devices, without regard to whether a final rule requires a particular locomotive to be equipped with such devices.

Finally, under new § 229.136(g), a passenger railroad would have to submit locomotive recording device information to FRA for review and approval at least 90 days prior to installing the image recording system, or for existing systems, not more than 30 days after the effective date of a final rule. This requirement would implement the FAST Act's recording device review and approval for passenger railroads under 49 U.S.C 20168(c). FRA will carefully examine this information to ensure that a passenger railroad's submission addresses the following: (1) the image recording system's minimum 12-hour continuous recording attributes; (2) the specifications for the crashworthy memory module utilized to store the image recordings that complies with the performance criteria in existing part 229, appendix D; and (3) the recording system's technical attributes, and procedures governing access by authorized personnel, addressing the accessibility of the recorded data in the event of a railroad accident under proposed § 229.136(f).

Like several other FRA regulations, FRA has proposed that it would review a railroad's submission and within 90 days the Associate Administrator for Safety/Chief Safety Officer would provide notice in writing of a decision to either approve or disapprove a railroad's submission. If a railroad's system is disapproved, FRA's written notice would specify the basis for such disapproval. If a railroad's system is disapproved, the railroad would then be prohibited from installing and utilizing the required image recording system until it received approval of an amended submission. For the convenience of both

industry and FRA, FRA plans to publish a list of any previously approved systems on its Internet website railroads can use as a reference.

The information collected under § 218.99(e)(5)(iii) will be used by railroads and their employees to provide a reliable means of determining track occupancy prior to commencing a shoving or pushing movement. Requiring that written procedures be adopted and complied with is a way to create a uniform method of leaving a car or cut of cars on a departure track safely, thus permitting the yardmaster or next crew entering to know that the entire length of a particular departure track is not clear. FRA will also use this information when it conducts inspections of these departure yards to review these procedures to ensure that any particular procedure, or lack thereof, does not create an undue safety risk and that the departure yard operation utilizing the shove light system is managed in a safe manner.

The information collected under § 218.99(e)(5)(iv) requires that the departure track be designated in writing. This is an important requirement because it is an exception to providing point protection. It will be used by railroad employees so that they know specifically on which tracks the exception applies. FRA is promulgating this requirement even though we are unaware of shove light systems being installed on other than designated departure tracks. The requirement in this paragraph is intended to prevent a railroad from installing shove lights on yard tracks that are not departure tracks and attempting to circumvent the point protection requirements under paragraph (b)(3) of this section.

The information collected from this rule's requirements will be used by FRA to enhance safety and drive down the number and severity of accidents/incidents and corresponding injuries, fatalities, and property damage caused by human factors in the daily operation of the nation's railroads. The information collected is presently used by FRA to monitor and enforce its safety regulations. In particular, under § 217.9, FRA reviews the filed copies of the code of operating rules, timetables, and timetable special instructions submitted by Class I, Class II, the National Railroad Passenger Corporation (Amtrak), and railroads providing commuter service in metropolitan or suburban areas to ensure that these railroads have developed safe operating rules and practices before commencing operations. Additionally, FRA reviews amendments to the code of operating rules, new timetables, and new timetable special instructions submitted by Class I, Class II, and railroads providing commuter service in metropolitan or suburban areas to attest that changes contemplated by these railroads are safe, necessary, and accord with Federal laws and regulations. FRA reserves the right to inspect Class III railroads' code of operating rules, new timetables, and new timetable special instructions, as well any amendments thereto, at their system headquarters to ensure that they have developed safe operating rules, and practices that conform to Federal laws and regulations.

Section 217.9 of this rule stipulates that railroad officers must be qualified on the railroad's operational rules in accordance with § 217.11 of this part; must be qualified on

the operational testing program requirements and procedures relevant to the testing the officer will conduct; and must receive appropriate field training, as necessary to achieve proficiency, on each operational test that the officer is authorized to conduct. This information will be and is used by railroads and FRA to ensure that all railroad testing officers on a particular railroad are properly qualified. Thus, a railroad testing officer who is trained and knowledgeable in the railroad's operating rules will be able to conduct competent tests and inspections, and will understand how the tests they conduct fit into the railroad's testing program. As a consequence, it will be more difficult for railroad testing officers to accept inconsistency in the application of operating rules. Operating rules that are more closely adhered to will provide increased levels of safety.

Additionally, under § 217.9, written records documenting the qualifications of each railroad testing officer must be retained at its system headquarters and at the division headquarters for each division where the officer is assigned and made available to representatives of FRA for inspection and copying during normal business hours. Each railroad to which this Part applies must also keep a record of the date, time, place, and result of each operational test and inspection that was performed in accordance with its program. Each record must also specify the officer administering the test and inspection and each employee tested under this section. Railroads use this information to monitor the proficiency of their employees and to obtain greater compliance with their operating rules. FRA uses these records to ensure and enforce compliance with this regulation, and analyzes records of these tests to determine the extent these tests and inspections conform to the railroads written program of operational tests and inspections.

Further, under § 217.9, each railroad to which this part applies, except for a railroad with less than 400,000 total employee work hours annually and except for a railroad subject to paragraph (e)(2) of this section, must conduct periodic reviews and analysis as provided in this paragraph and must retain, at each division headquarters, where applicable, and at its system headquarters, one copy of the required quarterly and six-month reviews of operational tests and inspections. Based on these reviews, officers designated by the railroads will use this information to make adjustments to the implementation of the railroad's operating rules inspection and testing program to ensure that the overall direction of the program is sound. Railroads will also use this information to redirect their testing officers in order to appropriately respond to any instances of non-compliance, including accidents/incidents. Finally, under this section, railroads with more than 400,000 man-hours per year must retain annual written summaries on operational tests and inspections for three years. FRA reviews these summaries to ensure compliance with Federal safety regulations, and utilizes them during accident/incident investigations to determine the cause(s) of such events.

Under § 217.11 and § 218.95, each railroad to which this Part applies must periodically instruct each affected employee on the meaning and application of the railroad's operating rules in accordance with a written program retained at its systems headquarters and at the division headquarters for each division where the employee is instructed. The



railroads use this information to ensure that their employees are qualified and that they understand their duties and responsibilities vis-a-vis the railroad's current operating rules/any changes to their current operating rules. FRA inspectors examine the written program of new railroads' operating rules and amendments to existing railroads' operating rules to verify that their rules conform to Federal safety laws and regulations. In particular, under § 218.95(a)(1) and (a)(2), FRA inspectors will review the railroads' written program to ensure that they include instruction for employees on the consequences of non-compliance, namely that FRA can take enforcement action through civil penalties or disqualification from safety sensitive service, and that the written program addresses the need to qualify employees on all aspects of the technology the employee will be utilizing when complying with the operating rules required by this subpart.

Also, under § 218.95, affected railroads must retain written records documenting the instruction, examination, and training of each employee at their system headquarters and at the division headquarters for each division where the employee is assigned, and must make these records available to representatives of FRA for inspection and copying during normal business hours. FRA inspectors will review these records to ensure that railroad employees are qualified/re-qualified for the duties that they are/will be performing. In the event of an accident/incident, FRA can quickly ascertain whether an unqualified employee performed safety-sensitive work. Moreover, these written records provide an invaluable resource to FRA and other safety investigators in determining the cause(s) of an accident/incident as well in devising corrective measures to prevent future such occurrences.

Further, § 218.95 states that upon review of the program of instruction, training, and examination required by this section, the Associate Administrator for Safety may, for cause stated, disapprove the program. Notification of such disapproval must be made in writing and specify the basis for the disapproval decision. If the Associate Administrator disapproves the program, the railroad must be provided an opportunity of not less than 30 days to respond and to provide written and/or oral submissions in support of the program. FRA (the Associate Administrator for Safety) will review a railroad's response to the notice of disapproval of its program to determine whether it is safe and in the public interest to rescind the disapproval decision or whether the railroad must amend its program to include requirements specified by the Associate Administrator. Upon affirming the disapproval decision, FRA (the Associate Administrator for Safety) will review the railroad's amended program of instruction, training, and examination to ensure that it meets agency requirements.

Under § 218.97, each employer is responsible for the training and compliance by its employees with the requirements of this subpart. Each employer must adopt and implement written procedures which guarantee each employee the right to challenge in good faith as to whether the procedures that will be applied to accomplish a specific task comply with the requirements of this subpart or any operating rule relied upon to fulfill

the requirements of this subpart. Each employer's written procedures must provide for prompt and equitable resolution of challenges made in accordance with this part. Also, a copy of the written procedures must be provided to each affected employee and made available for inspection and copying by representatives of FRA during normal business hours. Information under this requirement will be used by railroad officials and railroad employees to improve understanding of procedures and to enhance dialogue and clear communication between railroad officials and their employees in safely carrying out orders related to operating rules. The good faith challenge procedures that are clearly spelled out – and that employees can readily carry with them (along with their operating rules book) as ready references – will provide railroad employees an opportunity to question an order that may not comply with the railroads' own operating rules or that may be potentially unsafe, and will provide a means for all parties to promptly resolve any question so that an order can be effectively and safely carried out by the tasked party.

Also, under § 218.97(d), FRA has added new recordkeeping and retention requirements. Specifically, a copy of the written procedures required by this section must be retained at the railroad's system headquarters and at each division headquarters, and must be made available to representatives of FRA for inspection and copying during normal business hours. FRA will review railroads copies of written procedures to ensure that railroads are fully adopting, implementing, and complying with the requirements of this regulation, particularly the critical requirement relating to good faith challenges by railroad employees. Good faith challenges are intended to provide a forum that will allow railroad officials to listen to employees concerns regarding an operational order and to reconsider the validity of the order, thereby both improving the lines of communication among railroad employees and increasing adherence to the railroad's operating rules. Overall, railroad safety ought to be thereby enhanced. Under § 218.97(d)(2), a copy of any record of a good faith challenge verification decision, made in compliance with § 218.97(c)(4), must be retained at the railroad's system headquarters and at the division headquarters to which the employee was working when the challenge was initiated. Such record copies must be made available to FRA for inspection and copying during normal business hours. FRA will review these records again to ensure regulatory compliance and also to resolve any questions/disputes relating to a good faith challenge.

Under § 218.101, each railroad must have in effect an operating rule which establishes minimum requirements for preventing equipment from fouling connecting tracks unsafely, and each railroad must implement procedures that will enable employees to identify when the equipment is fouling. Additionally, each railroad officer, supervisor, and employee must uphold and comply with the rule. The information will be used by railroads to delineate the steps their employees must follow to avoid fouling connecting tracks unsafely, and will be used by railroad employees to better understand and perform their duties in a more effective and safe manner. The mandated operating rule and adherence to it by railroad employees will serve to reduce the likelihood of accidents, particularly collisions that result from equipment fouling connecting tracks.

Under §§ 218.103, 238.105, and 238.107, railroads will be required to adopt operating rules which meet the minimum requirements set forth in these sections concerning hand-operated switches, including cross-over switches. Railroads must specify minimum requirements necessary for an adequate job briefing. There are also additional requirements for hand-operated main track switches. The information required under these sections will be used by FRA to ensure railroads highlight the importance of properly handling switches and to ensure that those employees performing such operations are fully qualified and knowledgeable regarding the tasks they will be called on to perform.

In sum, all the enumerated requirements serve the goal of reducing the number of rail accidents/incidents and corresponding injuries and fatalities that occur each year.

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

FRA strongly endorses and highly encourages the use of advanced information technology, wherever possible, to reduce burden. Accordingly, FRA has authorized each railroad to which this Part applies the option of retaining the information prescribed in § 217.9 (d) and § 217.9 (f) by means of by electronic recordkeeping. This includes the written program of operational tests and inspections as well as the records of the date, time, place, and result of individual operational tests and inspections performed in accordance with the railroad's operating rules program. This also includes the annual summary on operational tests and inspections. FRA has authorized each railroad to which this Part applies the option of retaining by electronic recordkeeping its program for the periodic instruction of its operating rules under § 217.11, provided the stipulated requirements in § 217.9(e)(1) through (e)(5) are met. Also, the records of instruction, examination, and training required under (new) § 218.95(a)(5) can be retained electronically, as long as they are kept in accordance with §§ 217.9(g) and 217.111(c) instruction. Finally, under § 218.97(c)(2), railroad employees have the option of documenting electronically or in writing any protest to a direct order, and under § 218.97(d)(2), copies of records regarding good faith challenge verification decisions may be stored electronically if they are kept in accordance with the electronic recordkeeping standards set forth in § 217.9(g)(1) through (g)(5) of this chapter. Thus, approximately 43 percent of total responses may be kept electronically by railroads and their employees.

### **4. Efforts to identify duplication.**

Because this information collection is entirely associated with this rulemaking, the collection of information is unique. The information collection requirements – to FRA's knowledge – are not duplicated anywhere.

Similar data are not available from any other source at this time.

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 proposed rule. For this proposed rule, the “universe” is Class III freight railroads that own locomotives that would be required to have image recording devices under § 229.136. However, FRA is proposing in this NPRM to exempt Class III railroads from this rulemaking.

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 5 U.S.C. 601 as a small business concern that is independently owned and operated, and is not dominant in its field of operation. The U.S. Small Business Administration (SBA) has authority to regulate issues related to small businesses, and stipulates in its size standards that a “small entity” in the railroad industry is a for profit “line-haul railroad” that has fewer than 1,500 employees, a “short line railroad” with fewer than 500 employees, or a “commuter rail system” with annual receipts of less than seven million dollars. See “Size Eligibility Provisions and Standards,” 13 CFR part 121 subpart A.

This proposed rule would apply primarily to railroad carriers that provide regularly scheduled intercity rail passenger or commuter rail passenger transportation to the public. However, one passenger railroad is considered a small entity: the Hawkeye Express (operated by the Iowa Northern Railway Company (IANR)). All other passenger railroad operations in the United States are part of larger governmental entities whose service jurisdictions exceed 50,000 in population, and, based on the definition, are not considered small entities. Hawkeye Express is a short-haul passenger railroad that is not a commuter railroad or an intercity passenger railroad, and would not be affected by the NPRM proposals.

As the only small entity that could potentially be impacted by this regulation is not classified as a commuter railroad or an intercity passenger railroad, it would not be affected by the NPRM proposals. Thus, FRA does not believe that the provisions of the NPRM would impact any small entities. However, FRA is requesting comments as to the impact that the proposed rule would have on any small passenger railroad and on passenger railroads in general.

*Furthermore, it should be noted that, to avoid imposing unnecessary costs on industry and to avoid penalizing early adopters of camera technology being used for safety purposes, FRA is stipulating that an affected locomotive must be equipped with an image recording device **no later than four (4) years** after the date a final rule is published. FRA considered the potential economic and technical burdens involved with researching, acquiring, and installing image recording systems (and developing and implementing*

*relevant image recording system procedures, when formulating this proposed installation timeline).*

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

If this information were not collected or collected less frequently, railroad safety in the United States would be seriously jeopardized. Specifically, without the new information collected under § 229.136 regarding locomotive camera and audio recordings, FRA and NTSB investigators would lack critical data to review after an accident/incident to determine the circumstances and causes of that accident incident, particularly those involving train collisions or collisions between trains and motor vehicles at highway-rail grade crossings. Such accidents usually involve serious injuries and fatalities. The information provided by locomotive camera and audio recordings are required to contain data for the most recent 12 hours of that locomotive's operation, and will provide key information to NTSB and FRA investigators regarding the locomotive cab occupants actions or inactions. With data from locomotive event recorders and locomotive camera and audio recordings, the NTSB can make essential safety recommendations and FRA can develop suitable measures, including Emergency Orders, Safety Advisories, and regulations to prevent such accidents from recurring in the future.

Without this collection of information, FRA would have no way of knowing whether each affected railroad's code of operating rules, timetables, and timetable special instructions and subsequent amendments thereto conform to Federal safety laws and regulations. Unapproved operating rules, timetables, and timetable special instructions could have disastrous results. Without this collection of information, FRA would not know whether railroads conducted the required operational tests and inspections, and would not know whether these tests and inspections conform to the railroads' operating rules. Deprived of this information, FRA would not know whether railroads are engaging in unsafe practices. This could lead to higher rates of rail accidents/incidents with accompanying injuries – and possibly fatalities – to train crews and other railroad workers as well as to the general public.

Without the required written records documenting the qualifications of each railroad testing officer, FRA would have no way to verify whether railroad testing officers are qualified on the railroad's operating rules in accordance with §217.11 of this part, whether they are qualified on the operational testing program requirements and procedures relevant to the testing they will conduct, and whether they have received appropriate field training/retraining to achieve proficiency on each operational test that they are authorized to conduct. Railroad testing officers not properly qualified would lack the fundamental knowledge to perform adequate tests and inspections, thereby increasing the likelihood that railroad operating employees would inconsistently apply or

violate the railroad's operating rules. The result would be a greater number of human factor errors and more human-factor related accident/incidents and corresponding casualties.

Without the required periodic reviews of tests (quarterly, and six-month), FRA would have no way to ensure that affected railroads are conducting tests and inspections directed at the causes of human factor train accidents and employee casualties. Such structured tests or observations permit railroads to find employees who are in need of additional training or who may benefit from a reminder that it is not acceptable to take shortcuts that violate operating rules. Additional training of railroad employees and greater adherence to operating rules will enhance safety.

Without the annual written summaries on operational tests and inspections required of railroads with more than 400,000 man-hours per year, FRA would lose a valuable resource necessary to monitor large railroads compliance with Federal safety laws and regulations. These annual written summaries are also extremely helpful to FRA and other investigatory agencies when searching for the cause(s) of accidents/incidents. Without the required program of instruction on operating rules for employees and corresponding records, FRA would not know whether the various classes of railroad employees whose activities are governed by the railroad's operating rules are instructed periodically in these rules and are qualified to perform the tasks that they are assigned. Without this training, railroad employees might engage in unsafe practices that could result in more human factor-related accidents/incidents causing injuries, perhaps fatalities, to themselves, co-workers, and the general public. By careful monitoring of the information collected, FRA can take swift corrective action when safety in railroad operations begins to deteriorate.

Without the required good faith challenge procedures, railroad employees might be unsure how to comply with the requirements of this subpart or any operating rule relied upon to fulfill the requirements of this subpart. This could lead to employees taking greater risks or unsafe actions that lead to an accident/incident. The good faith challenges foster better communication through dialogue between employees and railroad officials. An employee who believes that a railroad officer has given the employee an order that does not comply with the railroad's own operating rules, or the operating rules required by this subpart, may initiate a good faith challenge. Good faith challenges will serve to resolve operational procedure questions and thus increase compliance with the railroad's own operating rules and with Federal regulations, thereby reducing the number of human factor errors by railroad employees and enhancing overall safety.

Finally, without the requirement that railroads have in effect an operating rule that establishes minimum requirements for leaving equipment in the clear in order to prevent equipment from fouling connecting tracks and an operating rule regarding hand-operating switches, cross-over switches, and derails, railroad employees might not be as highly focused in fulfilling their responsibilities in making sure that hand-operated switches and

derails are left properly lined before leaving a work site. Without such careful attention to detail and to properly operating such equipment, there could be increased numbers of preventable accident/incidents.

In sum, this collection of information enhances accountability and responsibility on the part of railroad employees. It aims to reduce the number of human factor errors and accidents/incidents with corresponding casualties that result from such errors. This collection of information furthers FRA's primary mission, which is to promote and enhance rail safety throughout the nation.

## 7. **Special circumstances.**

Class I railroads, Class II railroads, the National Railroad Passenger Corporation, and commuter railroads do not regularly file their operating rules, and any subsequent amendments thereto with FRA. However, each railroad must file one copy of its operating rules with FRA, and any amendment to its operating rules must also be filed with FRA within 30 days after it is issued. FRA believes that the 30-day requirement is not unreasonable, given the paramount importance of maintaining safe train operations.

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

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

FRA is publishing a Notice of Proposed Rulemaking titled Locomotive Image and Audio Recording Devices for Freight Trains in the Federal Register on July 24, 2019, soliciting public comment on the proposed rule and its associated information collection. See 84 FR 35712. FRA will respond to any comments received on the proposed rule and its information collection requirements and associated burden in the final rule and its associated information collection submission.

### Background

In March 1996, FRA established the RSAC, which provides a forum for collaborative rulemaking and program development. The RSAC includes representatives from all of the railroad industry's major stakeholder groups, including railroads, labor organizations, suppliers and manufacturers, and other interested parties.<sup>48</sup>

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<sup>48</sup> The member groups are: AAR; American Association of Private Railroad Car Owners; American Association of State Highway and Transportation Officials (AASHTO); American Chemistry Council; American Petroleum Institute; American Short Line and Regional Railroad Association (ASLRRA); American Train Dispatchers Association; Amtrak; APTA; Association of State Rail Safety Managers (ASRSM); Brotherhood of Locomotive Engineers and Trainmen (BLET); Brotherhood of Maintenance of Way Employees Division (BMWED); Brotherhood of Railroad Signalmen (BRS); Chlorine Institute; Federal Transit Administration;\* Fertilizer Institute; Heritage Rail Alliance; Institute of Makers of Explosives; International Association of Machinists and Aerospace Workers (IAMAW); International Association of Sheet Metal, Air, Rail and Transportation Workers (SMART);

When appropriate, FRA assigns a task to the RSAC, and, after consideration and debate, the RSAC may accept or reject the task. If the task is accepted, the RSAC establishes a working group that possesses the appropriate expertise and representation of interests to develop consensus recommendations to FRA for action on the task. When a working group comes to unanimous consensus on recommendations for action, the package is presented to the full RSAC for a vote. If the proposal is accepted by a simple majority of RSAC members, the proposal is formally recommended to the Administrator of FRA. FRA then determines what action to take on the recommendation. Because FRA staff members play an active role at the working group level discussing the issues and options and drafting the language of the consensus proposal, FRA often adopts the RSAC recommendation.

FRA is not bound to follow the recommendation, and the agency exercises its independent judgment on whether a recommended rule achieves the agency's regulatory goal(s), is soundly supported, and is consistent with policy and legal requirements. Often, FRA varies in some respects from the RSAC recommendation in developing the actual regulatory proposal or final rule. FRA explains any such variations in the rulemaking. However, to the maximum extent practicable, FRA utilizes RSAC to provide consensus recommendations with respect to both proposed and final agency action. If RSAC is unable to reach consensus on a recommendation for action, the task is withdrawn and FRA determines the best course of action.

In March 2014, the RSAC formed the Recording Device Working Group<sup>49</sup> to consider specific actions regarding the installation and use of locomotive-mounted audio and image recording devices. The RSAC voted to adopt Task 14-01, to develop regulatory recommendations addressing the installation and use of the recording devices in controlling locomotive cabs. The task statement stated that any recommendations should address installation requirements and timelines, technical controls, recording retention periods, retrieval of recordings, controlled custody of recordings, crashworthiness standards, use of recordings for accident investigation and railroad safety study purposes, and use of recordings to conduct operational tests.

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International Brotherhood of Electrical Workers; Labor Council for Latin American Advancement;\* League of Railway Industry Women;\* Metropolitan Transportation Authority; National Association of Railroad Passengers; National Association of Railway Business Women;\* National Conference of Firemen & Oilers (NCFO); National Railroad Construction and Maintenance Association; NTSB;\* Rail Passenger Car Alliance; Railway Supply Institute; Safe Travel America; Secretaria de Comunicaciones y Transporte (Mexico);\* Transport Canada;\* Transport Workers Union of America; Transportation Communications International Union/BRC; and Transportation Security Administration.\* \*Indicates associate membership.

<sup>49</sup> The Working Group was comprised of members from the following organizations: AASHTO; Amtrak; ASRSM; APTA; ASLRRRA; AAR; BLET; BMWED; BRS; FAA; FRA; IAMAW; NCFO; NTSB; SMART; and Transport Canada.



FRA developed Task 14-01 in response to NTSB Safety Recommendations R-10-01 & R-10-02 and recent railroad accidents. FRA believed it appropriate to evaluate the adoption of regulations addressing inward- and outward-facing locomotive recording devices to advance railroad safety. FRA's intent was to use recordings to: (1) assist in post-accident/incident investigations (railroad, highway-rail grade crossing, and trespasser); (2) assist in evaluating railroad employee fatigue and distraction, and crew interactions; and (3) add as a training tool for railroad employees and for conducting operational tests of railroad employees. The Working Group was to report recommendations to the full RSAC (or Committee) by April 1, 2015.

The Working Group held five meetings, three of which were multi-day meetings. The Working Group did not reach consensus on any aspect of the task, as FRA reported to the full Committee on May 28, 2015. During the Working Group discussions, FRA announced it intended to require inward-facing cameras and requested the Working Group's assistance to formulate the appropriate details and scope of a potential rulemaking. FRA presented rule text proposals for the Working Group's consideration. For various reasons conveyed during Working Group discussions, labor and industry representatives expressed general disagreement with FRA's position regarding regulatory requirements for inward-facing cameras and other locomotive recording devices. The labor organizations generally opposed any Federal inward-facing camera installation requirements for crew privacy reasons, and argued that FRA's efforts to improve railroad safety were better directed toward other regulatory matters (e.g., fatigue, PTC implementation). Railroads generally expressed opposition based on lack of perceived need for FRA to regulate in the area of locomotive recording devices, expressing concern regarding potential costs and hindrance to the advancement of recording device technology and uses. Rather than attempting to fully summarize the respective positions and arguments during the Working Group process here, FRA defers to labor and industry representatives to convey their respective positions on this NPRM's specific proposals via the notice and comment process.

During the RSAC process, labor and industry representatives on separate occasions asked FRA to independently pursue a voluntary pilot program in lieu of any FRA rulemaking proceeding. This pilot program would have been in addition to existing inward-facing camera usage across the railroad industry (e.g., Metrolink and KCS, which have installed inward-facing cameras on a larger scale than other railroads to date). The purpose of the pilot program would have been to evaluate the impacts of additional locomotive recording device usage and for purposes of gathering additional data. The January 2015 Working Group meetings were canceled so that labor and industry representatives could meet privately to discuss pilot project details. However, labor and industry representatives reported to FRA that they were unable to reach consensus agreement on a voluntary pilot project. At the May 28, 2015 full Committee meeting, FRA informed the Committee that, in the absence of a Committee recommendation, FRA would initiate a rulemaking proceeding to require locomotive recording devices based on the need to implement the safety initiatives.

**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.**

Under the Freedom of Information Act, the agency is required to make information collected in compliance with the regulations available to those requesting the documents. FRA does not actively solicit or encourage such requests.

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

Regarding locomotive image and audio recording devices, railroad radio conversations sent and received from a locomotive cab that may involve train crewmembers, dispatchers, operators, and railroad managers are already often recorded by railroads. Further, employee actions in operating trains that would be affected by this proposed regulation are also already recorded by locomotive event recorders required by existing Part 229. This NPRM proposes that passenger railroad employees occupying the cabs of locomotives that would be affected by this proposal have express notice (by way of required signage) that locomotives are equipped with recording devices. FRA also recommends that freight railroads voluntarily installing locomotive image and audio recording devices provide similar express notice (via signage or other methods) to their employees working on locomotives with recording devices, although the agency is not proposing to impose such a requirement in this rulemaking.

To address privacy concerns further, even in the absence of the current Congressional action to require locomotive-mounted recording devices and similar Federal regulatory action, it should be noted that the railroad industry has installed locomotive-mounted recording devices on its locomotives for years. FRA is not aware of any successful legal challenges to such installation. The Southern California Regional Rail Authority (Metrolink) installed in-cab audio and video recording devices after the 2008 accident in Chatsworth, California, that prompted NTSB Safety Recommendations R-10-01 & -02. The Brotherhood of Locomotive Engineers and Trainmen (BLET) challenged Metrolink's installation and use of such cameras in California State and Federal courts on the basis of privacy, substantive due process, procedural due process, and preemption violation claims. Neither court found the installation of such devices unlawful. In an opinion granting Metrolink's motion for summary judgement on the pleadings and dismissing all BLET claims, the United States District Court for the Central District of California stated that Metrolink's installation of locomotive audio and video recording devices had several legitimate purposes: (1) as an accident investigation tool; (2) to improve public safety; and (3) to test locomotive engineers' compliance with Metrolink's

operating rules.<sup>50</sup> The Los Angeles County California Superior Court similarly granted Metrolink's motion for summary judgement and entered a declaratory judgement in Metrolink's favor to resolve the BLET-filed lawsuit.<sup>51</sup>

Even though FRA does not believe there are any legal impediments preventing FRA from promulgating a regulation requiring locomotives audio and image recording devices in passenger operations as well as imposing certain requirements for freight railroads that voluntarily install such devices, FRA still recognizes the privacy concerns FRA conveyed to NTSB in FRA's initial responses to Safety Recommendations R-10-01 & -02, and that railroad uses of recordings beyond those enumerated in this NPRM could violate the law. This concern is particularly relevant regarding audio recordings of conversations in the cab of a locomotive. Examples of uses of such recordings that could violate the law are to retaliate against an employee based on the contents of in-cab audio recordings in violation of 49 U.S.C. 20109 (railroad employee whistleblower law) or to interfere with protected labor activities. The FAST Act, at 49 U.S.C. 20168(i), establishes that a passenger railroad carrier is prohibited from using in-cab audio or image recordings to retaliate against an employee. While enforcement of such prohibited retaliation against employees does not lie with FRA, but rather with other Federal and State agencies or the courts in private causes of action, FRA believes passenger railroads and freight railroads that voluntarily install such devices should adopt and adhere to policies that strictly prohibit such potential non-safety related abuses of locomotive recordings in violation of the FAST Act's prohibition.

During Working Group discussions, participants noted FRA did not have similar statutory protections for recordings it takes possession of during investigations, as any records FRA takes possession of during an investigation may be required to be disclosed under FOIA. However, 49 U.S.C. 20168(h) prohibits FRA from publicly disclosing recordings that FRA takes possession of after a railroad accident has occurred. Paragraph (h) is similar to the FOIA exemption for locomotive recordings given to the NTSB at 49 U.S.C. 1411(d), and prohibits FRA from disclosing publicly locomotive audio and image recordings, or transcripts of communications by and among train employees or other operating employees, or between such operating employees and communication center employees related to an accident FRA is investigating. FRA may make public a transcript or a written depiction of visual information that FRA deems relevant to the accident at the time other factual reports on the accident are released to the public.

As explained during Working Group meetings, FRA believes it would rarely take possession of recordings. For the most-serious accidents, FRA anticipates the NTSB would take possession of such recordings as they currently do, but that FRA would have

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<sup>50</sup> Bhd. of Locom. Eng. and Trainmen, et al. v. S. Cal. Reg'l Rail Auth., No. CV 09-8286 PA (JEMx), 2010 WL 2923286 (C.D. Cal. June 20, 2010).

<sup>51</sup> Bhd. of Locom. Engineers v. S. Cal. Reg'l Rail Auth., No. BC424287 (Super. Ct. L.A. County Cal. June 1, 2011).

the opportunity to view or listen to the recordings as a party to the investigation and to conduct its own parallel investigation. For less serious accidents or incidents that only FRA investigates, FRA would sometimes proceed as it does now, by having FRA inspectors view the recordings in the railroad's possession. In instances where FRA had a legal or evidentiary need to take physical possession of a locomotive recording from a railroad after an accident, the FAST Act now protects those recordings from public release.

Concerns regarding a railroad's unauthorized release of locomotive recordings and the privacy implications of such were also raised during the Working Group meetings. Currently, in the absence of an accident where NTSB or FRA has taken possession of a locomotive's recording devices, a railroad's internal policies govern the handling of locomotive audio and video recordings. Certain railroad draft policies were shared with the Working Group during its meetings on the railroads' procedures governing the chain-of-custody for recordings, access to the recordings, and release of the recordings. If adhered to, FRA believed these policies would address concerns regarding the proper control and handling of locomotive recordings.

Recognizing the need to ensure railroads appropriately protect recordings that might implicate privacy-related concerns, FRA has proposed rule text in § 229.136(f) that requires passenger railroads and freight railroads that voluntarily install inward- and outward-facing recording devices to adopt, and comply with, a chain-of-custody procedure governing the handling and the release of locomotive recordings. The chain-of-custody procedure must specifically address the preservation and handling requirements for post-accident/incident recordings that are provided to the NTSB or FRA during the agencies' accident investigations. A railroad's failure to comply with its procedures would be a violation of the Federal railroad safety regulations if § 229.136(f) is adopted in a final rule in this rulemaking.

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

These requirements have nothing to do with sensitive matters such as sexual behavior and attitudes, religious beliefs, and other matters commonly considered private.

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

*Note: Based on the latest available reporting data by railroads from 2017, FRA estimates that there are approximately 755 railroads currently operating in the United States. The breakdown is as follows: seven (7) Class I railroads, 11 Class II railroads, 33 passenger/commuter railroads, and 704 Class III railroads.*

*For the Locomotive Image and Audio Recording Devices proposed rule, Class III railroads are excluded. Thus, FRA estimates that a total of 45 railroads will be affected by its requirements.*

FRA is including the dollar equivalent cost for each of the itemized hours below using the AAR publication [Railroad Facts 2016](#) as the basis for each cost calculation. For railroad executives, officials, and staff assistants, the hourly wage rate is \$117 per hour. For professional and administrative staff, the hourly wage rate is \$75 per hour. For railroad train and engine employees (e.g., locomotive engineers, conductors, etc.), the hourly wage rate is \$73 per hour. For maintenance of way and structures employees (e.g., signalmen), the hourly wage rate is \$69 per hour. For maintenance of equipment and stores, the hourly wage rate is \$61. For transportation other than train and engine employees, the hourly wage is \$72 per hour. Note: All hourly wage calculations include 75% overhead costs.

Part 217.7 - Operating Rules; Filing and Recordkeeping

(a.) On or before December 21, 1994, each Class I railroad, Class II railroad, the National Railroad Passenger Corporation, and each railroad providing commuter service in a metropolitan or suburban area that is in operation on November 21, 1994, must file with the Federal Railroad Administrator, Washington, D.C. 20590, one copy of its code of operating rules, timetables, and timetable special instructions and each subsequent amendment to its code of operating rules, timetables, and timetable special instructions which were in effect on November 21, 1994. Each Class I railroad, each Class II railroad, and each railroad providing commuter service in a metropolitan or suburban area that commences operations after November 21, 1994, must file with the Administrator one copy of its code of operating rules, timetables, and timetable special instructions before it commences operations.

The requirement to file rules, timetables and timetable special instructions applies only to any railroad that qualifies as a Class I railroad or Class II railroad, or any new commuter railroad that is formed. FRA estimates that approximately two (2) railroads per year will fall into one of the specified categories. This is a one-time submission. It is estimated that it will take approximately one (1) hour to complete the required task. Total annual burden for this requirement is two (2) hours.

Respondent Universe:	2 new railroads
Burden time per response:	1 hour
Frequency of Response:	One-time
Annual number of Responses:	2 submissions
Annual Burden:	2 hours
Annual Cost	\$150 (\$75 x 2 hrs.)

**Calculation:** 2 submissions x 1 hr. = 2 hours

(b.) After November 21, 1994, each Class I railroad, each Class II railroad, the National

Railroad Passenger Corporation, and each railroad providing commuter service in a metropolitan or suburban area must file each new amendment to its code of operating rules, each new timetable, and each new timetable special instruction with the Federal Railroad Administrator within 30 days after it is issued.

Respondent universe is approximately 55 railroads. It is estimated that each railroad will issue approximately three (3) amendments per year (183 amendments total). It is estimated that each amendment will take approximately 20 minutes to complete. Total annual burden for this requirement is 55 hours.

Respondent Universe:	55 railroads
Burden time per response:	20 minutes
Frequency of Response:	On occasion
Annual number of Responses:	165 amendments
Annual Burden:	55 hours
Annual Cost	\$4,125 (\$75 x 55 hrs.)

**Calculation:** 165 amendments x 20 min. = 55 hours

(c.)(i) On or after November 21, 1994, each Class III railroad and any other railroad subject to this Part but not subject to paragraphs (a) and (b) of this section must keep one copy of its current code of operating rules, timetables, and timetable special instructions, and one copy of each subsequent amendment to its code of operating rules, each new timetable, and each new timetable special instruction at its system headquarters, and must make such records available to representatives of the Federal Railroad Administration for inspection and copying during normal business hours.

The burden of the first part of this requirement applies only to new railroads that are formed annually. FRA is assuming that all Class III railroads in existence today already keep copies of their current code of operating rules, timetables, and timetable special instructions, and any subsequent amendments thereto at their system headquarters. FRA estimates that approximately five (5) Class III railroads will be formed each year. It is estimated that it will take each railroad approximately .92 hour to perform the required task. Total annual burden for this requirement is five (5) hours.

Respondent Universe:	5 new railroads
Burden time per response:	55 minutes
Frequency of Response:	On occasion
Annual number of Responses:	5 submissions
Annual Burden:	5 hours
Annual Cost	\$375 (\$75 x 5 hrs.)

**Calculation:** 5 submissions x .92 hr. = 5 hours

(ii) There are an additional 704 Class III railroads subject to the second part of the above requirement. It is estimated that each railroad will issue approximately three (3) amendments each year (2,112 amendments total). It is further estimated that each amendment will take approximately 15 minutes to complete. Total annual burden for this requirement is 528 hours.

Respondent Universe:	704 railroads
Burden time per response:	15 minutes
Frequency of Response:	On occasion
Annual number of Responses:	2,112 amendments
Annual Burden:	528 hours
Annual Cost	\$39,600 (\$75 x 528 hrs.)

**Calculation:** 2,112 amendments x 15 min. = 528 hours

Total annual burden for this entire requirement is 590 hours (2 + 55 + 5 + 528).

Part 217.9 - Program of Operational Tests and Inspections; Recordkeeping

(a.) Requirement to conduct operational tests and inspections. Each railroad to which this part applies must periodically conduct operational tests and inspections to determine the extent of compliance with its code of operating rules, timetables, and timetable special instructions, specifically including test and inspections sufficient to verify compliance with the requirements of subpart F of part 218 of this chapter, in accordance with a written program as required by paragraph (c) of this section.

*The burden for this requirement is included under that of § 217.9(d) below. Consequently, there is no additional burden associated with this requirement.*

(b.) Railroad and railroad testing officer responsibilities. (1) Each railroad officer who conducts operational tests and inspections (railroad testing officer) must: (i) Be qualified on the railroad's operational rules in accordance with § 217.11 of this part; and (ii) Be qualified on the operational testing and inspection program requirements and procedures relevant to the testing and inspections the officer will conduct; (iii) Receive appropriate field training, as necessary to achieve proficiency, on each operational test or inspection that the officer is authorized to conduct.

*FRA believes that this requirement falls under one of the items in 5 CFR 1320.3(h)(7) (examinations designed to test the aptitude, abilities, or knowledge of the person tested) that are not considered **information** by OMB. Consequently, there is no burden associated with it.*

(iv) Conduct operational tests and inspections in accordance with the railroad's program

of operational tests and inspections.

*The burden for this requirement is also included under that of § 217.9(d) below. Consequently, there is no additional burden associated with this requirement.*

(2) Written records documenting qualification of each railroad testing officer must be retained at the railroad's system headquarters and at the division headquarters for each division where the officer is assigned and must be made available to representatives of FRA for inspection and copying during normal business hours.

FRA estimates that there are approximately 4,732 railroad testing officers and a record will be kept for each one under the above requirement. It is estimated that it will take approximately two (2) minutes to conduct the exam and complete the record for each railroad testing officer. Total annual burden for these requirements is 158 hours.

Respondent Universe:	755 railroads
Burden time per response:	2 minutes
Frequency of Response:	On occasion
Annual number of Responses:	4,732 records
Annual Burden:	158 hours
Annual Cost	\$11,534 (\$73 x 158 hrs.)

**Calculation:** 4,732 records x 2 min. = 158 hours

(b)(3) A railroad that utilizes inward-facing locomotive image or in-cab audio recordings to conduct operational tests and inspections shall adopt and comply with a procedure in its operational tests and inspections program that ensures employees are randomly subject to such operational tests and inspections involving image or audio recordings. The procedure adopted by a railroad must: **(New Requirement)**

(i) Establish objective, neutral criteria to ensure every employee subject to such operational tests and inspections is selected randomly for such operational tests and inspections within a specified time frame;

(ii) Not permit subjective factors to play a role in selection, i.e., no employee may be selected based on the exercise of a railroad's discretion; and

(iii) Require that any operational test or inspection performed using locomotive image recordings be performed within 72 hours of the completion of the employee's tour of duty that is the subject of the operational test. Any operational test performed more than 72 hours after the completion of the tour of duty that is the subject of the test is a violation of this section. The 72-hour limitation does not apply to investigations of



railroad accidents/incidents or to violations of Federal railroad safety laws, regulations, and orders, or any criminal laws.

FRA estimates that there are approximately 40 procedures will be developed by railroads in their operational tests and inspections programs that ensure employees are randomly subject to such operational tests and inspections involving image and audio recordings under the above requirement. It is estimated that it will take approximately 24 hours to develop each procedure. Total annual burden for these requirements is 960 hours.

Respondent Universe:	45 railroads
Burden time per response:	24 hours
Frequency of Response:	On occasion
Annual number of Responses:	40 operational tests/inspections procedures (involving image/audio recordings)
Annual Burden:	960 hours
Annual Cost	\$72,000 (\$75 x 960 hrs.)

**Calculation:** 40 operational tests/inspections procedures x 24 hrs. = 960 hours

(b)(4) FRA may review a railroad's procedure implementing paragraph (b)(3) of this section, and, for cause stated, may disapprove such procedure under paragraph (h) of this section. **(New Requirement)**

*FRA estimates that there will be zero (0) procedures disapproved by the agency under the above requirement. Consequently, there is no additional requirement associated with it.*

(c.) Written program of operational tests and inspections. Every railroad must have a written program of operational tests and inspections in effect. New railroads must have such a program within 30 days of commencing rail operations. The program must: (1) Provide for operational testing and inspection under the various operating conditions on the railroad. As of January 1, 2009, the program must address with particular emphasis those operating rules that cause or are likely to cause the most accidents or incidents, such as those accidents or incidents identified in the quarterly reviews, six month reviews, and the annual summaries as required under paragraphs (e) and (f), as applicable; (2) Require a minimum number of tests and inspections per year covering the requirements of part 218, subpart F of this chapter; (3) Describe each type of operational test and inspection required, including the means and procedures used to carry it out; (4) State the purpose of each type of operational test and inspection; (5) State, according to operating divisions where applicable, the frequency with which each type of operational test and inspection is conducted; (6) As of January 1, 2009, identify the officer(s) by name, job title, and, division or system, who shall be responsible for ensuring that the

program of operational tests and inspections is properly implemented. The responsibilities of such officers shall include, but not be limited to, ensuring that the railroad's testing officers are directing their efforts in an appropriate manner to reduce accidents/incidents and that all required reviews and summaries are completed. A railroad with divisions shall identify at least one officer at the system headquarters who is responsible for overseeing the entire program and the implementation by each division. (7) Include a schedule for making the program fully operative within 210 days after it begins.

Existing railroads already comply with this requirement. FRA estimates that approximately five (5) Class III railroads will commence operations each year. It is estimated that it will take approximately 9.92 hours to prepare the written program and file copies with the system and division headquarters (as required). Total annual burden for this requirement is 50 hours.

Respondent Universe:		5 new railroads
Burden time per response:		9.92 hours
Frequency of Response:		On occasion
Annual number of Responses:	5 programs	
Annual Burden:		50 hours
Annual Cost		\$5,850 (\$117
	x 50 hrs.)	

**Calculation:** 5 programs x 9.92 hrs. = 50 hours

(d.) Records. Each railroad to which this Part applies must keep a record of the date, time, place, and result of each operational test and inspection that was performed in accordance with its program. Each record must specify the officer administering the test and inspection and each employee tested. These records must be retained at the system headquarters and at each division headquarters where the tests and inspections are conducted for one calendar year after the end of the calendar year to which they relate. These records must be made available to representatives of the FRA for inspection and copying during normal business hours.

Respondent universe is 755 railroads. FRA estimates that railroads subject to this requirement will perform a total of approximately 9,120,000 tests per year. (FRA's estimate breaks down as follows: FRA believes Class I railroads will perform approximately 7,752,000 tests a year; Class II railroads will perform approximately 912,000 tests a year; commuter railroads will perform approximately 319,200 tests a year; and the remaining 600 railroads or Class IIIs will perform approximately 136,800 tests a year.) It is estimated that each test record will take approximately one (1) minute to complete. Total annual burden for this requirement is 152,000 hours.

Respondent Universe:	755 railroads
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Burden time per response:	1 minute
Frequency of Response:	On occasion
Annual number of Responses:	9,120,000 test records
Annual Burden:	152,000 hours
Annual Cost	\$11,096,000
	(\$73 x 152,000 hrs.)

**Calculation:** 9,120,000 test records x 1 min. = 152,000 hours

(2) Each railroad shall retain one copy of its current program for periodic performance of the operational tests and inspections required by paragraph (a) of this section and one copy of each subsequent amendment to such program. These records shall be retained at the system headquarters and at each division headquarters where the tests and inspections are conducted for three calendar years after the end of the calendar year to which they relate. These records shall be made available to representatives of the FRA for inspection and copying during normal business hours.

As stipulated above, railroads must retain one copy of each amendment to their operational test and inspection programs at their division headquarters and system headquarters. Respondent universe is 55 railroads. FRA estimates that each railroad will issue approximately three (3) amendments per year (a total 165 amendments annually). FRA estimates that it will take approximately 70 minutes to complete this task. Total annual burden for this requirement is 193 hours.

Respondent Universe:	55 railroads
Burden time per response:	70 minutes
Frequency of Response:	On occasion
Annual number of Responses:	165 amendments
Annual Burden:	193 hours
Annual Cost	\$14,475 (\$75
	x 193 hrs.)

**Calculation:** 165 amendments x 70 min. = 193 hours

(e.) Reviews of tests and inspections and adjustments to the program of operational tests. This paragraph (e) shall apply to each Class I railroad and the National Railroad Passenger Corporation effective April 1, 2009 and to all other railroads subject to this paragraph effective July 1, 2009.

Reviews by railroads other than passenger railroads. Each railroad to which this Part applies must conduct periodic reviews and analysis as provided in this paragraph and must retain, at each division headquarters, where applicable, and at its system headquarters, one copy of the following reviews, provided however that this requirement does not apply to either a railroad with less than 400,000 total employee work hours

annually or a passenger railroad subject to paragraph (e)(2) of this section.

(ii) *Quarterly review.* The designated officer of each division headquarters, or system headquarters, if no division headquarters exists, must conduct a written quarterly review of the accident/incident data, the results of prior operational tests and inspections, and other pertinent safety data for that division or system to identify the relevant operating rules related to those accidents/incidents that occurred during the quarter. The review must also include the name of each railroad testing officer, the number of tests and inspections conducted by each officer, and whether the officer conducted the minimum number of each type of test or inspection required by the railroad's program. Based upon the results of that review, the designated officer shall make any necessary adjustments to the tests and inspections required of railroad officers for the subsequent period(s). Quarterly reviews and adjustments must be completed no later than 30 days after the quarter has ended.

This requirement applies to seven (7) Class I railroads, 20 Class II railroads, and approximately 10 Class III freight railroads (totaling 37 railroads in all). Consequently, FRA estimates that approximately 148 written quarterly reviews will be conducted under the above requirement. It is estimated that it will take approximately two (2) hours to complete each written quarterly review. Total annual burden for this requirement is 296 hours.

Respondent Universe:	37 railroads
Burden time per response:	2 hours
Frequency of Response:	On occasion
Annual number of Responses:	148 written quarterly reviews
Annual Burden:	296 hours
Annual Cost	\$21,608 (\$73 x 296 hrs.)

**Calculation:** 148 written quarterly reviews x 2 hrs. = 296 hours

(iii) *Six-month review.* The designated officer of each system headquarters office responsible for development and administration of the program of operational tests and inspections must conduct a review of the program of operational tests and inspections on a six month basis to ensure that it is being utilized as intended, that the quarterly reviews provided for in this paragraph have been properly completed, that appropriate adjustments have been made to the distribution of tests and inspections required, and that the railroad testing officers are appropriately directing their efforts. Six month reviews must be completed no later than 60 days after the review period has ended.

This requirement applies to the seven (7) Class I railroads, 20 Class II railroads, and approximately 10 Class III freight railroads (totaling 37 railroads in all). Consequently, FRA estimates that approximately 37 designations will be made and approximately 74

semi-annual reviews will be conducted under the above requirement. It is estimated that it will take approximately five (5) seconds to make the required designations and approximately two (2) hours to complete each written semi-annual review. Total annual burden for this requirement is 148 hours.

Respondent Universe:	37 railroads
Burden time per response:	5 seconds + 2 hours
Frequency of Response:	On occasion
Annual number of Responses:	37 designations + 74 six-month reviews
Annual Burden:	148 hours
Annual Cost	\$10,804 (\$73 x 148 hrs.)

**Calculation:** 37 designations x 5 sec. + 74 six-month reviews x 2 hrs. = 148 hours

(2) *Reviews by passenger railroads.* Not less than once every six months, the designated officers of the National Railroad Passenger Corporation and of each railroad providing commuter service in a metropolitan or suburban area must conduct periodic reviews and analyses as provided in this paragraph and must retain, at each division headquarters, where applicable, and at its system headquarters, one copy of the reviews. Each such review must be completed within 30 days of the close of the period.

(i) The designated officer(s) must conduct a written review of: (i) the operational testing and inspection data for each division, if any, or the system to determine compliance by the railroad testing officers with its program of operational tests and inspections required by paragraph (c) of this section. At a minimum, this review must include the name of each railroad testing officer, the number of tests and inspections conducted by each officer, and whether the officer conducted the minimum number of each type of test or inspection required by the railroad's program.

(ii) accident/incident data, the results of prior operational tests and inspections, and other pertinent safety data for each division, if any, or the system to identify the relevant operating rules related to those accidents/incidents that occurred during the period. Based upon the results of that review, the designated officer shall make any necessary adjustments to the tests and inspections required of railroad officers for the subsequent period(s); and

(iii) implementation of the program of operational tests and inspections from a system perspective, to ensure that it is being utilized as intended, that the other reviews provided for in this paragraph have been properly completed, that appropriate adjustments have been made to the distribution of tests and inspections required, and that the railroad testing officers are appropriately directing their efforts.

FRA estimates that approximately 34 designations will be made and approximately 68 six-month reviews will be conducted under the above requirement. It is estimated that it will take approximately five (5) seconds to make the required designations and approximately two (2) hours to complete each written six-month review. Total annual burden for this requirement is 136 hours.

Respondent Universe:	Amtrak + 33 railroads
Burden time per response:	5 seconds + 2 hours
Frequency of Response:	On occasion
Annual number of Responses:	34 designations + 68 written six-month reviews
Annual Burden:	136 hours
Annual Cost	\$9,928 (\$73 x 136 hrs.)

**Calculation:** 34 designations x 5 sec. + 68 six mo. rev. x 2 hrs. = 136 hours

(3) *Records retention.* The records of periodic reviews required in paragraphs (e)(1) and (e)(2) of this section must be retained for a period of one year after the end of the calendar year to which they relate and must be made available to representatives of the Federal Railroad Administration for inspection and copying during normal business hours.

FRA estimates that approximately 290 records of periodic reviews will be retained under the above requirement. It is estimated that it will take approximately one (1) minute to keep each quarterly plan and each written review record. Total annual burden for this requirement is five (5) hours.

Respondent Universe:	71 railroads (37 + 34)
Burden time per response:	1 minute
Frequency of Response:	On occasion
Annual number of Responses:	290 review records
Annual Burden:	5 hours
Annual Cost	\$375 (\$75 x 5 hrs.)

**Calculation:** 290 view records x 1 min. = 5 hours

(f) *Annual summary on operational tests and inspections.* Before March 1 of each calendar year, each railroad to which this part applies, except for a railroad with less than 400,000 total employee work hours annually, must retain, at each of its division headquarters and at the system headquarters of the railroad, one copy of a written

summary of the following with respect to its previous calendar year activities: The number, type, and result of each operational test and inspection, stated according to operating divisions where applicable, that was conducted as required by paragraphs (a) and (c) of this section. These records must be retained for three calendar years after the end of the calendar year to which they relate, and must be made available to representatives of the Federal Railroad Administration for inspection and copying during normal business hours.

(g) *Electronic recordkeeping.* Each railroad to which this Part applies is authorized to retain by electronic recordkeeping the information prescribed in this section, provided that all of the following conditions are met: (1) The railroad adequately limits and controls accessibility to such information retained in its electronic database system and identifies those individuals who have such access; (2) The railroad has a terminal at the system headquarters and at each division headquarters; (3) Each such terminal has a computer (i.e., monitor, central processing unit, and keyboard) and either a facsimile machine or a printer connected to the computer to retrieve and produce information in a usable format for immediate review by FRA representatives; (4) The railroad has a designated representative who is authorized to authenticate retrieved information from the electronic system as true and accurate copies of the electronically kept records; and (5) The railroad provides representatives of the Federal Railroad Administration with immediate access to these records for inspection and copying during normal business hours and provides printouts of such records upon request.

FRA estimates that approximately 71 summary records will be kept each year under the above requirement. It is estimated that it will take approximately 61 minutes to complete each summary and corresponding record. Total annual burden of this requirement is 72 hours.

Respondent Universe:	71 railroads (37 + 34)
Burden time per response:	61 minutes
Frequency of Response:	Annually
Annual number of Responses:	71 summary records
Annual Burden:	72 hours
Annual Cost	\$5,400 (\$75 x 72 hrs.)

**Calculation:** 71 summary records x 61 min. = 72 hours

(h) Upon review of the program of operational tests and inspections required by this section, the Associate Administrator for Safety may, for cause stated, disapprove the program. Notification of such disapproval shall be made in writing and specify the basis for the disapproval decision. If the Associate Administrator for Safety disapproves the program, (1) the railroad has 35 days from the date of the written notification of such disapproval to: (i) amend its program and submit it to the Associate Administrator for

Safety for approval; or (ii) provide a written response in support of the program to the Associate Administrator for Safety, who informs the railroad of FRA’s final decision in writing; and (2) a failure to submit the program with the necessary revisions to the Associate Administrator for Safety in accordance with this paragraph will be considered a failure to implement a program under this part.

FRA estimates that approximately five (5) programs will be disapproved by the Associate Administrator under the above requirement. As a result, railroads will submit five (5) written supporting document defending their programs. It is estimated that it will take each railroad approximately 60 minutes to complete its supporting document. Total annual burden of this requirement is five (5) hours.

Respondent Universe:	755 railroads
Burden time per response:	60 minutes
Frequency of Response:	Annually
Annual number of Responses:	5 supporting documents
Annual Burden:	5 hours
Annual Cost	\$375 (\$75 x 5 hrs.)

**Calculation:** 5 supporting documents x 60 min. = 5 hours

Additionally, FRA estimates that approximately five (5) programs will be need to be amended under the above requirement. It is estimated that it will take each railroad approximately 30 minutes to amend its program and submit the revised documents. Total annual burden of this requirement is three (3) hours.

Respondent Universe:	755 railroads
Burden time per response:	30 minutes
Frequency of Response:	Annually
Annual number of Responses:	5 amended program documents
Annual Burden:	3 hours
Annual Cost	\$225 (\$75 x 3 hrs.)

**Calculation:** 5 amended program supporting documents x 30 min. = 3 hours

Total annual burden for this entire requirement is 154,026 hours (158 + 960 + 50 + 152,000 + 193 + 296 + 148 + 136 + 5 + 72 + 5 + 3).

Part 217.11 - Program of Instruction on Operating Rules; Recordkeeping; Electronic Recordkeeping

(a.) To ensure that each railroad employee whose activities are governed by the railroad’s



operating rules understands those rules, each railroad to which this Part applies must periodically instruct each such employee on the meaning and application of the railroad's operating rules in accordance with a written program retained at its system headquarters and at the division headquarters for each division where the employee is instructed. Each railroad is required to file one copy of its current program for periodic instruction of its employees. The system headquarters must retain one copy of all these records while the division headquarters for each division where the employees are instructed must retain one copy of all portions of these records that the division applies and enforces.

*Existing railroads have already complied with this requirement. Consequently, there is no additional burden associated with it.*

New Railroads

FRA estimates that approximately five (5) railroads will commence operations each year and will be required to retain one copy of their programs at their division and/or system headquarters. It is estimated that it will take each railroad approximately eight (8) hours to develop an operating rules instruction program. Total annual burden for this requirement is 40 hours.

Respondent Universe:	5 new railroads
Burden time per response:	8 hours
Frequency of Response:	On occasion
Annual number of Responses:	5 programs
Annual Burden:	40 hours
Annual Cost	\$3,000 (\$75 x 40 hrs.)

**Calculation:** 5 programs x 8 hrs. = 40 hours

(b.) On or after November 21, 1994, or 30 days before commencing operations, whichever is later, each railroad to which this Part applies must retain one copy of its current program for the periodic instruction of its employees as required by paragraph (a) of this section and one copy of each subsequent amendment to that program. The system headquarters of the railroad must retain one copy of all these records; the division headquarters for each division where the employees are instructed must retain one copy of all portions of these records that the division applies and enforces. These records must be made available to representatives of the Federal Railroad Administration for inspection and copying during normal business hours. This program must: (1) Describe the means and procedures used for instruction of the various classes of affected employees; (2) State the frequency of instruction and the basis for determining that frequency; (3) Include a schedule for completing the initial instruction of employees who are already employed when the program begins; (4) Begin within 30 days after November 21, 1994, or the date of commencing operations, whichever is later; and

(5) Provide for initial instruction of each employee hired after the program begins.

Each railroad to which this Part applies is authorized to retain by electronic recordkeeping its program for periodic instruction of its employees on operating rules, provided that the requirements stated in §217.9(g)(1) through (g)(5) of this Part are satisfied.

The burden for the current program for the periodic instruction of employees is provided in (a) above. Additionally, each railroad must retain one copy of each amendment to its operating rules instruction program at its division and/or system headquarters. FRA estimates that Class I and Class II railroads will issue a total of approximately 80 amendments each year, and that Class III railroads will issue approximately 30 amendments each year (a total of 110). It is estimated that it will take approximately 30 minutes to prepare an amendment and retain one copy of the amendment at each division and/or system headquarters. Total annual burden for this requirement is 55 hours.

Respondent Universe:	755 railroads
Burden time per response:	30 minutes
Frequency of Response:	On occasion
Annual number of Responses:	110 amendments/copies
Annual Burden:	55 hours
Annual Cost	\$4,125 (\$75 x 55 hrs.)

**Calculation:** 110 amendments/copies x 30 min. = 55 hours

Total annual burden for this entire requirement is 95 hours (40 + 55).

#### Part 218.95 - Instruction, Training, and Examination

(a.) *Program.* Effective January 1, 2009, each railroad must maintain a written program of instruction, training, and examination of employees for compliance with operating rules implementing the requirements of this subpart to the extent these requirements are pertinent to the employee's duties. If all requirements of this subpart are satisfied, a railroad may consolidate any portion of the instruction, training or examination required by this subpart with the program of instruction required under § 217.11 of this chapter. An employee who successfully completes all instruction, training, and examination required by this written program shall be considered qualified.

(1) The written program of instruction, training, and examination must address the requirements of this subpart, as well as consequences of non-compliance.

(2) The written program of instruction, training, and examination must include procedures addressing how the railroad qualifies employees in any technology necessary

to accomplish work subject to the requirements of this subpart. Such procedures shall include, but are not limited to, those which explain: (i) the purpose for using the technology; (ii) how an employee will be expected to use the technology; (iii) how to detect malfunctioning equipment or deviations from proper procedures; (iv) how to respond when equipment malfunctions or deviations from proper procedures are detected; and (v) how to prevent unintentional interference with the proper functioning of the technology.

*The burden for this requirement is already included under that of § 217.11 above. Consequently, there is no additional burden associated with this provision.*

(3) *Implementation schedule for employees, generally.* Each employee performing duties subject to the requirements in this subpart must be initially qualified prior to July 1, 2009.

*The burden for this requirement is already included under that of § 217.11 above. Consequently, there is no additional burden associated with this provision.*

(4) After July 1, 2009, no employee shall perform work requiring compliance with the operating rules implementing the requirements of this subpart unless qualified on these rules within the previous three years.

*The burden for this requirement is already included under that of § 217.11 above. Consequently, there is no additional burden associated with this provision.*

(5) The records of successful completion of instruction, examination, and training required by this section must document qualification of employees under this subpart. Written records documenting successful completion of instruction, training, and examination of each employee required by this subpart must be retained at its system headquarters and at the division headquarters for each division where the employee is assigned for three calendar years after the end of the calendar year to which they relate and made available to representatives of the FRA for inspection and copying during normal business hours. Each railroad to which this Part applies is authorized to retain a program, or any records maintained to prove compliance with such program, by electronic recordkeeping in accordance with §§ 217.9(g) and 217.11(c) of this chapter. Because the required instruction, examination, and training takes place every other year or every three years in some cases, FRA estimates that approximately 98,000 records will be kept under the above requirement. It is estimated that it will take approximately one (1) minute to complete each record. Total annual burden for this requirement is 1,633 hours.

Respondent Universe:	755 railroads
Burden time per response:	1 minute
Frequency of Response:	On occasion

Annual number of Responses:	98,000 employee records
Annual Burden:	1,633 hours
Annual Cost	\$122,475 (\$75 x 1,633 hrs.)

**Calculation:** 98,000 employee records x 1 min. 1,633 hours

(c) Upon review of the program of instruction, training, and examination required by this section, the Associate Administrator for Safety may, for cause stated, disapprove the program. Notification of such disapproval shall be made in writing and specify the basis for the disapproval decision. If the Associate Administrator for Safety disapproves the program, (1) the railroad has 35 days from the date of the written notification of such disapproval to: (i) amend its program and submit it to the Associate Administrator for Safety for approval; or (ii) provide a written response in support of the program to the Associate Administrator for Safety, who informs the railroad of FRA’s final decision in writing; and (2) a failure to submit the program with the necessary revisions to the Associate Administrator for Safety in accordance with this paragraph will be considered a failure to implement a program under this Part.

FRA estimates that approximately five (5) written/oral responses will be submitted to the agency under the above requirement. It is estimated that it will take approximately one (1) hour to complete each response. Total annual burden for this requirement is five (5) hours.

Respondent Universe:	5 railroads
Burden time per response:	1 hour
Frequency of Response:	On occasion
Annual number of Responses:	5 written/oral submissions
Annual Burden:	5 hours
Annual Cost	\$375 (\$75 x 5 hrs.)

**Calculation:** 5 written/oral responses x 1 hr. = 5 hours

Additionally, FRA estimates that the Associate Administrator will disapprove five (5) of these written/oral submissions and, as a result, approximately five (5) programs will be amended under the above requirement. It is estimated that it will take each railroad approximately 30 minutes to amend its program and submit the revised document to FRA. Total annual burden for this requirement is three (3) hours.

Respondent Universe:	755 railroads
Burden time per response:	30 minutes
Frequency of Response:	On occasion
Annual number of Responses:	5 amended program documents

Annual Burden:	3 hours
Annual Cost	\$225 (\$75 x 3 hrs.)

**Calculation:** 5 amended program documents x 30 min. = 3 hours

Total annual burden for this entire requirement is 1,641 hours (1,633 + 5 + 3).

### Part 218.97 - Good Faith Challenge Procedures

(a) *Employee Responsibility.* An employee must inform the railroad or employer whenever the employee makes a good faith determination that the employee has been directed to either take actions that would violate FRA regulations regarding the handling of equipment, switches, and fixed derails as required by this subpart, or to take actions that would violate the railroad's operating rules implementing the requirements of this subpart.

*The burden for this requirement is included under that of § 218.97 (c) below. Consequently, there is no additional burden associated with this requirement.*

(b) *General Procedures.* Each railroad or employer is responsible for the training of and compliance by its employees with the requirements of this subpart. (1) Each railroad or employer shall adopt and implement written procedures which guarantee each employee the right to challenge in good faith whether the procedures that will be used to accomplish a specific task comply with the requirements of this subpart or any operating rule relied upon to fulfill the requirements of this subpart. Each railroad or employer's written procedures shall provide for prompt and equitable resolution of challenges made in accordance with this subpart. (2) The written procedures required by this section must indicate that the good faith challenge described in paragraph (b)(1) is not intended to abridge any rights or remedies available to the employee under a collective bargaining agreement, or any Federal law, including, but not limited to, 29 U.S.C. 651 *et seq.*, 6 U.S.C. 1142 or 49 U.S.C. 20109.

*Railroads have already fulfilled the above requirement. Consequently, there is no additional burden associated with it.*

(3) Each affected employee shall be instructed on the written procedures required by this paragraph as part of the training prescribed by § 217.11 of this chapter.

*The burden for this requirement is already included under that of § 217.11 above. Consequently, there is no additional burden associated with this provision.*

(4) A copy of the written procedures must be provided to each affected employee and made available for inspection and copying by representatives of the Federal Railroad Administration (FRA) during normal business hours.

This requirement has already been fulfilled for current employees. However, new employees will still have to receive a copy of the written procedures. Consequently, FRA estimates that approximately 4,732 affected employees will receive a copy of the written procedures under the above requirement. It is estimated that it will take approximately five (5) minutes to make each copy and another (1) minute to distribute it to each employee. Total annual burden for this requirement is 473 hours.

Respondent Universe:	755 railroads
Burden time per response:	6 minutes
Frequency of Response:	One-time
Annual number of Responses:	4,732 written procedures copies
Annual Burden:	473 hours
Annual Cost	\$35,475 (\$75 x 473 hrs.)

**Calculation:** 4,732 written procedures copies x 6 min. = 473 hours

(c) The written procedures shall: (1) grant each employee the right to challenge any directive which, based on the employee's good faith determination, would cause the employee to violate any requirement of this subpart or any operating rule relied upon to fulfill the requirements of this subpart; (2) provide that the railroad or employer shall not require the challenging employee to comply with the directive until the challenge resulting from the good faith determination is resolved; (3) provide that the railroad or employer may require the challenging employee to perform tasks unrelated to the challenge until the challenge is resolved; (4) provide that the railroad or employer may direct an employee, other than the challenging employee, to perform the challenged task prior to the challenge being resolved as long as this other employee is informed of the challenge and does not also make a good faith determination that the challenged task would violate FRA regulations regarding the handling of equipment, switches, and fixed derails as required in this subpart, or a railroad's operating rules implementing the requirements of this subpart.

FRA estimates that approximately 15 good faith challenges will be made by railroad employees under the above requirement. It is estimated that it will take approximately 10 minutes to make a good faith challenge. Total annual burden for this requirement is three (3) hours.

Respondent Universe:	98,000 railroad employees
Burden time per response:	10 minutes

Frequency of Response:	On occasion
Annual number of Responses:	15 good faith challenges
Annual Burden:	3 hours
Annual Cost	\$219 (\$73 x 3 hrs.)

**Calculation:** 15 good faith challenges x 10 min. = 3 hours

(5) Provide that a challenge may be resolved by: (i) a railroad or employer officer's acceptance of the employee's request; (ii) an employee's acceptance of the directive; (iii) an employee's agreement to a compromise solution acceptable to the person issuing the directive; or (iv) as further determined under paragraph (d) of this of this section.

Based on the above numbers, FRA estimates that approximately 15 challenges will be resolved by one of the above listed methods. It is estimated that it will take approximately five (5) minutes for each type of resolution. Total annual burden for this requirement is one (1) hour.

Respondent Universe:	15 railroads
Burden time per response:	5 minutes
Frequency of Response:	On occasion
Annual number of Responses:	15 challenge responses
Annual Burden:	1 hour
Annual Cost	\$73 (\$73 x 1 hr.)

**Calculation:** 15 challenge responses x 5 min. = 1 hour

(d) In the event that the challenge cannot be resolved because the person issuing the directive determines the employee's challenge has not been made in good faith or there is no reasonable alternative to the direct order, the written procedures must: (1) provide for immediate review by at least one officer of the railroad or employer, except for each railroad with less than 400,000 total employee work hours annually. This immediate review must: (1) not be conducted by the person issuing the challenged directive, or that person's subordinate; and (ii) provide that a challenge may be resolved by using the same options available for resolving the challenge as the initial officer as well as the option described in paragraph (d)(2), except that the reviewing officer's decision shall not be subject to further review, unless provided for in the railroad's or employer's written procedures.

FRA estimates that approximately five (5) immediate reviews will be conducted by an officer of the railroad in response to a good faith challenge under the above requirement.

It is estimated that it will take approximately 30 minutes to conduct each review. Total annual burden for this requirement is three (3) hours.

Respondent Universe:	15 railroads
Burden time per response:	30 minutes
Frequency of Response:	On occasion
Annual number of Responses:	5 immediate reviews
Annual Burden:	3 hours
Annual Cost	\$219 (\$73 x 3 hr.)

**Calculation:** 5 immediate reviews x 30 min. = 3 hours

(2) Provide that if the officer making the railroad’s or employer’s final decision concludes that the challenged directive would not cause the employee to violate any requirement of this subpart or the railroad’s or employer’s operating rule relied upon to fulfill the requirements of this subpart and directs the employee to perform the challenged directive, the officer shall further explain to the employee that Federal law may protect the employee from retaliation if the employee refuses to do the work and if the employee’s refusal is a lawful, good faith act.

FRA estimates that the officer will further explain, in five (5) out of the 15 good faith challenges mentioned above, to the employee that Federal law may protect the employee from retaliation if the employee refuses to do the work and if the employee’s refusal is a lawful, good faith act. It is estimated that it will take approximately one (1) minute to convey this information. Total annual burden for this requirement is .08 hour.

Respondent Universe:	15 railroads
Burden time per response:	1 minute
Frequency of Response:	On occasion
Annual number of Responses:	5 explanations
Annual Burden:	.08 hour
Annual Cost	\$6 (\$73 x .08 hr.)

**Calculation:** 5 explanations x 1 min. = .08 hour

(3) Provide that the employee be afforded an opportunity to document electronically or in writing any protest to the railroad’s or employer’s final decision before the tour of duty is complete. The employee must be afforded the opportunity to retain a copy of the protest.

FRA estimates that approximately 10 protests will be made under the above requirement. It is estimated that each protest will take approximately 15 minutes to complete



electronically or in writing. Total annual burden for this requirement is three (3) hours.

Respondent Universe:	10 railroads
Burden time per response:	15 minutes
Frequency of Response:	On occasion
Annual number of Responses:	10 electronic/written protests
Annual Burden:	3 hours
Annual Cost	\$219 (\$73 x 3 hrs.)

**Calculation:** 10 electronic/written protests x 15 min. = 3 hours

Additionally, FRA estimates that approximately 10 copies of protests will be made under the above requirement. It is estimated that each protest copy will take approximately one (1) minute to complete electronically or in writing. Total annual burden for this requirement is .17 hour.

Respondent Universe:	10 railroads
Burden time per response:	1 minute
Frequency of Response:	On occasion
Annual number of Responses:	10 protest copies
Annual Burden:	.17 hour
Annual Cost	\$12 (\$73 x .17 hr.)

**Calculation:** 10 protest copies x 1 min. = .17 hour

(4) Provide that the employee, upon written request, has a right to further review by a designated railroad or employer officer, within 30 days after the expiration of the month during which the challenge occurred, for the purpose of verifying the proper application of the regulation, law, procedure or rule in question.

FRA estimates that approximately three (3) written requests and three (3) further reviews will take place by a designated railroad or employer officer under the above requirement. It is estimated that each further review will take approximately 15 minutes to complete. Total annual burden for this requirement is two (2) hours.

Respondent Universe:	10 railroads
Burden time per response:	15 minutes + 15 minutes
Frequency of Response:	On occasion
Annual number of Responses:	3 written requests + 3 further reviews
Annual Burden:	2 hours
Annual Cost	\$146 (\$73 x 2

hrs.)

**Calculation:** 3 written requests + 3 further reviews x 15 min. = 2 hours

The verification decision shall be made in writing to the employee.

FRA estimates that approximately 10 requests will be made by railroad employees to have the verification decision in writing. It is that it will take approximately 10 minutes to make the request and complete the written verification decision. Total annual burden for this requirement is two (2) hours.

Respondent Universe:	10 railroads
Burden time per response:	10 minutes
Frequency of Response:	On occasion
Annual number of Responses:	10 requested written verification decisions
Annual Burden:	2 hours
Annual Cost	\$146 (\$73 x 2 hrs.)

**Calculation:** 10 requested written verification decisions x 10 min. = 2 hours (rounded off)

(e) *Recordkeeping and record retention.* (1) A copy of the written procedures required by this section must be retained at the employer or railroad's system headquarters and at each division headquarters, and made available to representatives of the FRA for inspection and copying during normal business hours.

FRA estimates that approximately 755 copies of written procedures will be retained at the railroad's system headquarters and at each division headquarters under the above requirement. It is estimated that it will take approximately five (5) minutes to complete each copy. Total annual burden for this requirement is 63 hours.

Respondent Universe:	755 railroads
Burden time per response:	5 minutes
Frequency of Response:	On occasion
Annual number of Responses:	755 copies of written procedures
Annual Burden:	63 hours
Annual Cost	\$4,725 (\$75 x 63 hrs.)

**Calculation:** 755 copies written procedures x 5 min. = 63 hours

(2) A copy of any written good faith challenge verification decision, made in accordance

with paragraph (d)(4), must be retained at the employer or railroad’s system headquarters and at the division headquarters to which the employee was working when the challenge was initiated, and made available to representatives of the FRA for inspection and copying during normal business hours for at least one calendar year after expiration of the year during which the decision was issued.

Each employer or railroad to which this subpart applies is authorized to retain by electronic recordkeeping the information prescribed in this subpart in accordance with the electronic recordkeeping standards set forth in § 217.9(g)(1) through (5) of this chapter. FRA estimates that approximately 20 copies of good faith challenge verifications will be retained at the railroad’s system headquarters and at each division headquarters under the above requirement. It is estimated that it will take approximately five (5) minutes to complete each copy. Total annual burden for this requirement is two (2) hours.

Respondent Universe:	20 railroads
Burden time per response:	5 minutes
Frequency of Response:	On occasion
Annual number of Responses:	20 verification decision copies
Annual Burden:	2 hours
Annual Cost	\$150 (\$75 x 2 hrs.)

**Calculation:** 20 verification decision copies x 5 min. = 2 hours

Total annual burden for this entire requirement is 552 hours (473 + 3 + 1 + 3 + .08 + 3 + .17 + 2 + 2 + 63 + 2).

Part 218.99 - Shoving or Pushing Movements

(a) Each railroad must adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which complies with the requirements of this section, that person shall be considered to have violated the requirements of this section.

This one-time requirement has already been fulfilled by the earlier estimated 704 Class III railroads. However, FRA estimates that five (5) new railroads that will come into existence and 27 passenger/commuter railroads will modify their operating rule to comply with the requirements contained in paragraphs (b) and (c) of this. It is estimated that it will take approximately one (1) hour to complete such a modification. Total annual burden for this requirement is 32 hours.

Respondent Universe:	755 railroads
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Burden time per response:	1 hour
Frequency of Response:	One-time
Annual number of Responses:	32 operating rule modifications
Annual Burden:	32 hours
Annual Cost	\$2,400 (\$75 x 32 hrs.)

**Calculation:** 32 operating rule modifications x 1 hr. = 32 hours

(2) The following requirements for shoving or pushing movements do not apply to rolling equipment intentionally shoved or pushed to permit the rolling equipment to roll without power attached, i.e., free rolling equipment, during switching activities known as kicking, humping, or dropping cars.

(b) General movement requirements. (1) *Job briefing.* Rolling equipment shall not be shoved or pushed until the locomotive engineer participating in the move has been briefed by the employee who will direct the move. The job briefing must include the means of communication to be used between the locomotive engineer and the employee directing the move and how point protection will be provided. (2) *No unrelated tasks.* During the shoving or pushing movement, the employee directing the movement shall not engage in any task unrelated to the oversight of the shoving or pushing movement

*This is a usual and customary procedure for railroads. Consequently, there is no burden associated with it.*

(3) *Point Protection.* When rolling equipment or a lite locomotive consist is shoved or pushed, point protection must be provided by a crewmember or other qualified employee by: (i) visually determining that the track is clear. The determination that the track is clear may be made with the aid of monitored cameras or other technological means, provided that it and the procedures for use provide an equivalent level of protection to that of a direct visual determination by a crewmember or other qualified employee properly positioned to make the observation as prescribed in this section and appendix D to this Part; and (ii) giving signals or instructions necessary to control the movement.

*Again, this is a usual and customary procedure for railroads. Consequently, there is no burden associated with it.*

(c) *Additional requirements for remote control movements.* All remote control movements are considered shoving or pushing movements, except when the remote control operator controlling the movement is riding the leading end of the leading locomotive in a position to visually determine conditions in the direction of the movement. In addition to the other requirements of this section, (1) when initiating a remote control shoving or pushing movement: (i) the remote control operator shall visually determine the direction the equipment moves; or (ii) a member of the crew shall

visually determine the direction the equipment moves and confirm the direction with the remote control operator. If no confirmation is received, the movement must be immediately stopped; and (2) if technology is relied upon, whether primarily or as a safeguard, to provide pull-out protection by preventing the movement from exceeding the limits of a remote control zone, the technology shall be demonstrated (i) to be failsafe; or (ii) to provide suitable redundancy to prevent unsafe failure.

*Again, this is a usual and customary procedure for railroads. Consequently, there is no burden associated with it.*

(d) *Remote control zone, exception to track is clear requirements.* After an initial track is clear determination has been made in an activated remote control zone, it is not necessary to make a new determination prior to each subsequent shoving or pushing movement provided that: (1) The controlling locomotive of the remote control movement is on the leading end in the direction of movement, i.e., the movement occurs on the pull-out end; (2) The remote control zone is not jointly occupied; and (3) The initial determination was made by a crewmember of either: (i) The remote control crew; (ii) A relieved remote control crew who has transferred the remote control zone directly to the relieving crew; or (iii) The last jointly occupying crew who directly communicates, i.e., not through a third party, to a remote control crewmember that the remote control zone is no longer jointly occupied and meets the requirements for track is clear.

*Again, this is a usual and customary procedure for railroads. Consequently, there is no burden associated with it.*

(e) *Operational exceptions.* A railroad does not need to comply with paragraphs (b) through (d) in the following circumstances:

(1) Push-pull operations when operated from the leading end in the direction of movement, i.e., push mode;

(2) Shoving or pushing operations with manned helper locomotives or distributed power locomotives assisting a train when the train is being operated from the leading end in the direction of the movement;

(3) During the performance of roadway maintenance activity under the direct control of a roadway worker performing work in accordance with railroad operating rules specific to roadway workers; or

(4) When the leading end of a shoving movement is on a main track or signaled siding, under the following conditions:

(i) The train dispatcher gives authority or permission to make the movement and verifies that:

(A) Another movement or work authority is not in effect within the same or overlapping limits unless conflicting movements are protected; and

(B) A main track is not removed from service by a work authority within the same or overlapping limits;

*Again, this is a usual and customary procedure for railroads. Consequently, there is no burden associated with it.*

(ii) Movement is limited to the train's authority;

(iii) Movement shall not be made into or within yard limits, restricted limits, drawbridges, or work authority limits;

(iv) Movement shall not enter or foul a public highway-rail grade crossing or pedestrian crossing except when:

(A) Crossing gates are in the fully lowered position; or

(B) A designated and qualified employee is stationed at the crossing and has the ability to communicate with trains; or

*Railroads already have designated employees of theirs who perform this function as part of their normal routine duties. Consequently, there is no additional burden involved with this requirement.*

(C) At crossings equipped only with flashing lights or passive warning devices, when it is clearly seen that no traffic is approaching or stopped at the crossing and the leading end of the movement over the crossing does not exceed 15 miles per hour; and

(v) Movement shall not be made into or within interlocking limits or controlled point limits unless the following conditions are met:

(A) The signal governing movement is more favorable than restricting aspect;

(B) Each signal governing movement into and through interlocking limits or controlled point limits shall be continuously observed by a member of that crew who is in a position to determine that the train's movement has occupied the circuit controlling that signal as evidenced by that signal assuming its most restrictive aspect; and

(C) Movement does not exceed the train's length.

*Crewmembers already perform this function as part of their normal routine duties. Consequently, there is no additional burden involved with this requirement.*

(5) Shoving or pushing movements made in the direction of the circuited end of a designated departure track equipped with a shove light system, if all of the following conditions are met:(i) The shove light system is demonstrated to be failsafe; (ii) The shove light system is arranged to display a less favorable aspect when the circuited section of the track is occupied; (iii) Written procedures are adopted and complied with that provide for a reliable means of determining track occupancy prior to commencing a shoving or pushing movement.

*This one-time requirement has already been fulfilled by all the Class I railroads. Consequently, there is no additional burden associated with this requirement.*

(iv) The track is designated in writing; (v) The track is under the exclusive and continuous control of a yardmaster or other qualified employee; (vi) The train crewmember or other qualified employee directing the shoving or pushing movement complies with the general movement requirements contained in paragraphs (b)(1) and (b) (2) of this section; (vii) All remote control shoving or pushing movements comply with the requirements contained in paragraph (c)(1) of this section; and (viii) The shove light system is continuously illuminated when the circuited section of the track is unoccupied.

*This one-time requirement has already been fulfilled by all the Class I railroads. Consequently, there is no additional burden associated with this requirement.*

Total annual burden for this requirement is 32 hours.

#### Part 218.101 - Leaving Rolling and On-Track Maintenance-of-Way Equipment in the Clear

(a) Each railroad must adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which complies with the requirements of this section, that person shall be considered to have violated the requirements of this section.

(b) Rolling and on-track maintenance-of-way equipment shall not be left where it will foul a connecting track unless: (1) The equipment is standing on a main track and a siding track switch that the equipment is fouling is lined for the main track on which the equipment is standing; or (2) The equipment is standing on a siding and a main track switch that the equipment is fouling is lined for the siding on which the equipment is standing; or (3) The equipment is standing on a yard switching lead track, and the yard track switch that the equipment is fouling is lined for the yard switching lead track on which the equipment is standing; or (4) The equipment is on an industry track beyond

the clearance point of the switch leading to the industry.

(c) Each railroad must implement procedures that enable employees to identify clearance points and a means to identify locations where clearance points will not permit a person to safely ride on the side of a car.

This one-time requirement has already been fulfilled by the earlier estimated 704 railroads. However, FRA estimates that five (5) new railroads that will come into existence and 27 passenger/commuter railroads will amend their operating rules under the above requirement. It is estimated that it will take each railroad approximately 30 minutes to develop such procedures and amend its operating rule. Total annual burden for this requirement is 16 hours.

Respondent Universe:	755 railroads
Burden time per response:	30 minutes
Frequency of Response:	One-time
Annual number of Responses:	32 amended operating rules
Annual Burden:	16 hours
Annual Cost	\$1,200 (\$75 x 16 hrs.)

**Calculation:** 32 amended operating rules x 30 min. = 16 hours

Part 218.103 - Hand-operated switches, including cross-over switches.

(a)(1) Each railroad must adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which complies with the requirements of this section, that person shall be considered to have violated the requirements of this section.

This one-time requirement has already been fulfilled by the earlier estimated 704 railroads. However, FRA estimates that five (5) new railroads that will come into existence and 27 passenger/commuter railroads will modify/amend their operating rules under the above requirement. It is estimated that it will take each railroad approximately 60 minutes to develop such procedures and amend its operating rule. Total annual burden for this requirement is 32 hours.

Respondent Universe:	755 railroads
Burden time per response:	60 minutes
Frequency of Response:	On occasion
Annual number of Responses:	32 modified operating rules
Annual Burden:	32 hours
Annual Cost	\$2,400 (\$75 x 32 hrs.)



**Calculation:** 32 modified operating rules x 60 min. = 32 hours

(2) Each railroad must specify minimum requirements necessary for an adequate job briefing.

Class I and II railroads already do this. Consequently, only Class III railroads are affected by this requirement. All of the earlier estimated 704 Class III railroads have already fulfilled this one-time requirement. However, there still are approximately five (5) railroads that will need to modify their operating rules to meet the above requirement. It is estimated that it will take each railroad approximately 30 minutes to modify its operating rule. Total annual burden for this requirement is three (3) hours.

Respondent Universe:	755 railroads
Burden time per response:	30 minutes
Frequency of Response:	On occasion
Annual number of Responses:	5 modified operating rules
Annual Burden:	3 hours
Annual Cost	\$225 (\$75 x 3 hrs.)

**Calculation:** 5 modified operating rules x 30 min. = 3 hours

(b) *General.* Employees operating or verifying the position of a hand-operated switch must: (1) Conduct job briefings, before work is begun, each time a work plan is changed, and at completion of the work; (2) Be qualified on the railroad's operating rules relating to the operation of the switch; (3) Be individually responsible for the position of the switch in use; (4) Visually determine that switches are properly lined for the intended route and that no equipment is fouling the switches; (5) Visually determine that the points fit properly and the target, if so equipped, corresponds with the switch's position; (6) After operating a switch and before making movements in either direction over the switch, ensure that the switch is secured from unintentional movement of the switch points; (7) Ensure that a switch is not operated while rolling and on-track maintenance-of-way equipment is fouling the switch, or standing or moving over the switch; and (8) After operating a switch, ensure that when not in use, each switch is locked, hooked or latched, if so equipped.

*This is the usual and customary practice/procedure. Consequently, there is no additional burden associated with this requirement.*

(c) Rolling and on-track maintenance-of-way equipment shall not foul a track until all hand-operated switches connected with the movement are properly lined, or in the case of hand-operated switches designed and permitted to be trailed through, until the intended route is seen to be clear or the train has been granted movement authority. When a

conflicting movement is approaching a hand-operated switch, the track shall not be fouled or the switch operated. (d) When rolling and on-track maintenance-of-way equipment has entered a track, the hand-operated switch to that track shall not be lined away from the track until the equipment has passed the clearance point of the track.

*This is the usual and customary practice. Consequently, there is no additional burden associated with this requirement.*

Total annual burden for this entire requirement is 35 hours (32 + 3).

#### 218.105 Additional operational requirements for hand-operated main track switches.

(a) Each railroad must adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which complies with the requirements of this section, that person shall be considered to have violated the requirements of this section.

*The burden for this requirement is included under that of § 218.103(a) above. Consequently, there is no additional burden associated with this provision.*

(b) *Designating switch position.* The normal position of a hand-operated main track switch must be designated by the railroad in writing and the switch must be lined and locked in that position when not in use except when: (1) The train dispatcher directs otherwise with respect to the position of a hand-operated main track switch and the necessary protection is provided; or (2) The hand-operated switch is left in the charge of a crewmember of another train, a switchtender, or a roadway worker in charge.

*The normal position of a hand-operated main track switch is designated by the railroad in writing in its operating rules, and the rest of the requirement is the usual and customary practice. Consequently, there is no additional burden associated with this requirement.*

(c) *Additional job briefing requirements for hand-operated main track switches.*

(1) Before a train or a train crew leaves the location where any hand-operated main track switch was operated, all crewmembers must have verbal communication to confirm the position of the switch.

*This is the usual and customary practice. Consequently, there is no additional burden associated with this requirement.*

(2) In the case of exclusive track occupancy authority established under § 214.321, foul time under § 214.323, or train coordination under § 214.325, when a roadway worker

qualified to operate hand-operated main track switches is granted permission by the roadway worker in charge to occupy or otherwise use the limits of the exclusive track occupancy, such employee receiving permission to occupy the working limits shall report the position of any such switches operated upon expiration of the authority limits to the roadway worker in charge or to a designated intermediary employee who shall convey the switch position to the roadway worker in charge.

*This is the usual and customary practice. Consequently, there is no additional burden associated with this requirement.*

*(d) Releasing Authority Limits.* In non-signaled territory, before an employee releases the limits of a main track authority and a hand-operated switch is used to clear the main track, and, prior to departing the switch's location, the following conditions are required: (1) the employee releasing the limits, after conducting a job briefing in accordance with this subpart, must report to the train dispatcher that the hand-operated main track switch has been restored to its normal position and locked, unless the train dispatcher directs that the hand-operated main track switch be left lined and locked in the reverse position and the necessary protection is provided; (2) if the report of the switch position is correct, the train dispatcher must repeat the reported switch position information to the employee releasing the limits and ask whether that is correct; and (3) the employee releasing the limits must then confirm to the train dispatcher that this information is correct.

*This is the usual and customary practice. Consequently, there is no additional burden associated with this requirement.*

#### 218.107 Additional operational requirements for hand-operated crossover switches.

Each railroad must adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which complies with the requirements of this section, that person shall be considered to have violated the requirements of this section.

*The burden for this requirement is included under that of § 218.103(a) above. Consequently, there is no additional burden associated with this provision.*

#### 218.109 Hand-operated fixed derails.

- A. (a) (1) Each railroad must adopt and comply with an operating rule which complies with the requirements of this section. When any person including, but not limited to, each railroad, railroad officer, supervisor, and employee violates any requirement of an operating rule which complies with the requirements of this section, that person shall be considered to have violated the requirements of this section. (2) Each railroad shall specify minimum requirements necessary for an adequate job briefing.

*The burden for this requirement is included under that of § 218.103(a) above. Consequently, there is no additional burden associated with this provision.*

- B. Employees operating or verifying the position of a fixed derail must: (1) Conduct job briefings, before work is begun, each time a work plan is changed, and at completion of the work; (2) Be qualified on the railroad's operating rules relating to the operation of the derail; (3) Be individually responsible for the position of the derail in use; (4) Determine that the target, if so equipped, corresponds with the derail's position; (5) Determine that the derail is secured by: (i) placing the throw lever in the latch stand, if so equipped; (ii) placing the lock or hook in the hasp, if so equipped; and (iii) testing such latches, locks or hooks; and (6) Ensure that when not in use, derails are locked, hooked, or latched if so equipped.

*This is the usual and customary practice. Consequently, there is no additional burden associated with this requirement.*

#### Part 220.21(b) - Railroad Operating Rules; Radio Communications; Recordkeeping

Thirty days before commencing to use radio communications in connection with railroad operations, each railroad must retain one copy of its current operating rules with respect to radio communications at the locations prescribed in paragraphs (b)(1) and (b)(2) of this section. Each amendment to these operating rules must be filed at such locations within 30 days after it is issued. These records must be made available to representatives of the Federal Railroad Administration for inspection and photocopying during normal business hours.

(1) Each Class I railroad, each Class II railroad, each railroad providing intercity rail passenger service, and each railroad providing commuter service in a metropolitan or suburban area must retain such rules at each of its division headquarters and at its system headquarters; and (2) Each Class III railroad and any other railroad subject to this Part, but not subject to paragraph (b)(1) of this section, must retain such rules at the system headquarters of the railroad.

Railroads then are required to retain one copy of their current operating rules with respect to radio communications and one copy of each subsequent amendment thereto. All Class I railroads, Class II railroads, the National Railroad Passenger Corporation (Amtrak), and railroads providing commuter service in a metropolitan or suburban area must retain their radio rules at their division headquarters and system headquarters. All Class III railroads must retain their radio rules at their system headquarters.

*Railroads usually prepare their radio rules in conjunction with their operating rules as required by 49 CFR § 217.7. Section 220.21(b), however, does not require Class I railroads, Class II railroads, the National Railroad Passenger Corporation (Amtrak), and railroads providing commuter service in a metropolitan or suburban area to file*

*their radio rules with FRA. Instead, these railroads must retain their radio rules at their system headquarters and division headquarters. (Class III railroads need only retain their radio rules at their system headquarters.) Therefore, FRA believes that the radio rules requirements will not impose any additional burden on the railroad industry than what is already required under 49 CFR § 217.7.*

§ 229.136     Locomotive image recording systems (New Requirements)

(a)(1) *Duty to equip and record.* Effective [**DATE 4 YEARS AFTER DATE OF PUBLICATION OF FINAL RULE**], each lead locomotive of a train used in commuter or intercity passenger service must be equipped with an image recording system to record images of activities ahead of the locomotive in the direction of travel (outward-facing image recording device), and of activities inside the cab of the locomotive (inward-facing image recording device).

(i) If the lead locomotive is equipped with an image recording system, the system must be turned on and recording whenever a train is in motion, at all train speeds.

(ii) If operating circumstances cause the controlling locomotive to be other than the lead locomotive, railroads must also record images of activities inside the cab of the controlling locomotive.

(iii) Both cabs of a dual-cab locomotive shall be equipped with inward- and outward-facing image recording systems. Image recordings for only a dual-cab locomotive's active cab and the leading end of the locomotive's movement are required to be made and retained.

(2) Image recording systems installed after [**DATE 1 YEAR AFTER DATE OF PUBLICATION OF FINAL RULE**] on new, remanufactured, or existing lead locomotives used in commuter or intercity rail passenger service shall meet the requirements of this section. Lead locomotives used in commuter or intercity passenger service must be equipped with an image recording system meeting the requirements of this section no later than [**DATE 4 YEARS AFTER DATE OF PUBLICATION OF FINAL RULE**]

(3) For lead locomotives in commuter or intercity rail passenger service, railroads must note the presence of any image and audio recording systems in the REMARKS section of the Form FRA F6180-49A in the locomotive cab.

FRA estimates that there are approximately 4,120 "Remarks sections" of Form FRA F6180-49A kept in the locomotive cab will note the presence of any image and audio recording systems under the above requirement. It is estimated that it will take approximately two (2) minutes to complete each "Remarks section". Total annual burden for these requirements is 137 hours.

Respondent Universe:	4,500 Locomotives
Burden time per response:	15 seconds
Frequency of Response:	On occasion
Annual number of Responses:	4,120 completed "Remarks section
Annual Burden:	17 hours
Annual Cost	\$1,241 (\$73 x 17 hrs.)

**Calculation:** 4,120 completed "Remarks section x 15 sec. = 17 hours

(4) The image recording system shall record at least the most recent 12 hours of operation of a lead locomotive in commuter or intercity passenger service.

(5) Locomotive recording device data for each lead locomotive used in commuter or intercity passenger service shall be recorded on a memory module meeting the requirements for a certified crashworthy event recorder memory module described in appendix D to this part.

FRA believes that this requirement will affect approximately 4,120 locomotives. Thus, FRA estimates there are approximately 4,120 image recording systems will record at least the most recent 12 hours of operation of an operating locomotive under the above requirement. It is estimated that it will take the minimum 12 hours to complete each record. Total annual burden for these requirements is 49,440 hours.

Respondent Universe:	4,500 Locomotives
Burden time per response:	12 hours
Frequency of Response:	On occasion
Annual number of Responses:	4,120 operating locomotive recordings
Annual Burden:	49,440 hours
Annual Cost	\$0 (no labor charge; \$0 x 49,440 hrs.)

**Calculation:** 4,120 operating locomotive recordings x 12 hrs. =  
49,440 hours

*(b) Outward-facing recording system requirements for locomotives in commuter or intercity passenger service.*

(1) The outward-facing image recording system for lead locomotives in commuter or intercity passenger service shall:

(i) Include an image recording device aimed parallel to the centerline of tangent track within the gauge on the front end of the locomotive;

(ii) Be able to distinguish the signal aspects displayed by wayside signals;

(iii) Record at a frame rate of a minimum of 15 frames per second (or its equivalent) and have sufficient resolution to record the position of switch points 50 feet in front of the locomotive;

(iv) Be able to capture images in daylight or with normal nighttime illumination from the headlight of the locomotive; and

(v) Include an accurate time and date stamp on outward-facing image recordings.

(2) If a lead locomotive in commuter or intercity passenger service experiences a technical failure of its outward-facing image recording system, then the system shall be removed from service and handled in accordance with paragraph (i) of this section.

*(c) Inward-facing image recording system requirements for locomotives in commuter or intercity passenger service.*

(1) The inward-facing image recording system on lead locomotives in commuter or intercity passenger service shall include image recording device positioned to provide complete coverage of all areas of the controlling locomotive cab where a crewmember typically may be positioned, including complete coverage of the instruments and controls required to operate the controlling locomotive in normal use, and:

(i) Have sufficient resolution to record crewmember actions, including whether a crewmember is physically incapacitated and whether a crewmember is complying with the indications of a signal system or other operational control system; and

(ii) Record at a frame rate of at least 5 frames per second and be capable of using ambient light in the cab, and when ambient light levels drop too low for normal operation, automatically switch to infrared or another operating mode that enables the recording sufficient clarity to comply with the requirements of this paragraph (c)(1).

(2) The inward-facing recording(s) on lead locomotives in commuter or intercity passenger service shall include an accurate time and date stamp.

(3) No inward-facing image recordings on locomotives in commuter or intercity passenger service may be made of any activities within a locomotive's sanitation compartment as defined by § 229.5, and no image recording device shall be installed in a location where the device can record activities within a sanitation compartment.

(4) If a lead locomotive on an intercity passenger service experiences a technical failure of its inward-facing image recording system, then the system shall be removed from service and handled in accordance with paragraph (i) of this section.

*(d) Image and audio recording system download protection requirements for locomotives in commuter or intercity passenger service.* Railroads must provide convenient wire or wireless connections to allow authorized railroad personnel to download audio or image recordings from both any standard memory module and a certified crashworthy memory module in lead locomotives in commuter or intercity passenger service. The railroads also must use electronic security measure(s) to prevent unauthorized download of the recordings.

*(e) Inspection, testing, and maintenance for image recording systems on locomotives in commuter or intercity passenger service.* The image recording system on lead locomotives in commuter or intercity passenger service shall have self-monitoring features to assess whether the system is operating properly, including whether the system is powered on.

(1) If a fault with the image recording system is detected, the locomotive shall not be used in the lead position after its next daily inspection per § 229.21.

(2) At each periodic inspection required under § 229.23 of this part, the railroad conducting the inspection shall take sample download(s) to confirm operation of the system, and, if necessary, repair the system to full operation.

*(f) Handling of recordings.*

*(1) Chain-of-custody procedure.* Each railroad with locomotives in commuter or intercity passenger service subject to this section shall adopt, maintain, and comply with a chain-of-custody procedure governing the handling and the release of the locomotive image recordings described in paragraphs (a) through (c) of this section and any locomotive audio recordings. The chain-of-custody procedure must specifically address the preservation and handling requirements for post-accident/incident recordings provided to FRA or the NTSB under paragraph (f)(2) of this section.

FRA estimates that there are approximately 20 chain-of-custody procedures will be adopted, maintained, and complied with under the above requirement. It is estimated that it will take approximately 48 hours to develop each chain-of-custody procedure. Total annual burden for these requirements is 960 hours.

Respondent Universe:	27 Railroads
Burden time per response:	48 hours
Frequency of Response:	On occasion
Annual number of Responses:	20 chain-of-custody procedures



Annual Burden:	960 hours
Annual Cost	\$72,000 (\$75
	x 960 hrs.)

**Calculation:** 20 chain-of-custody procedures x 48 hrs. = 960 hours

(2) *Accident/incident preservation.* If any locomotive in commuter or intercity passenger service is equipped with an image or audio recording system and is involved in an accident/incident that must be reported to FRA under part 225 of this chapter, the railroad that was using the locomotive at the time of the accident shall, to the extent possible, and to the extent consistent with the safety of life and property, preserve the data recorded by each such device for analysis by FRA or other Federal agencies. A railroad must either: (i) provide the image and/or audio data in a format readable by FRA or other Federal agencies; or (ii) make available to FRA or other Federal agencies any platform, software, media device, etc. that is required to play back the image and/or audio data. This preservation requirement shall expire one (1) year after the date of the accident unless FRA or another Federal agency notifies the railroad in writing that it must preserve the recording longer. Railroads may extract and analyze such data for the purposes described in paragraph (f)(3) of this section, only if:

- (i) The original downloaded data file, or an unanalyzed exact copy of it, is retained in secure custody under the railroad’s procedure adopted under paragraph (f)(1) of this section; and
- (ii) It is not utilized for analysis or any other purpose, except by direction of FRA or NTSB.

Based on agency data for the years 2007 to 2016, FRA estimates that there will be approximately 163 reportable accidents involving locomotives equipped with an image and/or audio recording system per year under the above requirement. It is estimated that it will take approximately 12 hours to retrieve the recording device and preserve its data. Total annual burden for these requirements is 1,956 hours (*includes voluntary freight railroads and restates requirement under section 229.135(e)*).

Respondent Universe:	31 Railroads
Burden time per response:	12 hours
Frequency of Response:	On occasion
Annual number of Responses:	163 preserved accident data recordings
Annual Burden:	1,956 hours
Annual Cost	\$140,832 (\$72
	x 1,956 hrs.)

**Calculation:** 163 preserved accident data recordings x 12 hrs. = 1,956 hours

(3) *Recording uses.* A railroad may use the image and audio recordings from a locomotive in commuter or intercity passenger service subject to this section to:

(i) Investigate an accident/incident that is required to be reported to FRA under part 225 of this chapter;

(ii) Investigate a violation of a Federal railroad safety law, regulation, or order, or a railroad's operating rules and procedures;

(iii) Conduct an operational test under § 217.9 of this chapter.

*The burden to conduct operational tests and keep corresponding records is included above under § 217.9. Consequently, there is no additional burden associated with it.*

(iv) Monitor for unauthorized occupancy of a locomotive's cab or a control cab locomotive's operating compartment;

(v) Investigate a violation of a criminal law;

(vi) Assist Federal agencies in the investigation of a suspected or confirmed act of terrorism; or

(vii) Perform inspection, testing, maintenance, or repair activities to ensure the proper installation and functioning of an inward-facing image recorder.

*(g) Locomotive image recording system approval process.* Each railroad with locomotives in commuter or intercity passenger service subject to this section must provide the Associate Administrator for Safety and Chief Safety Officer, Federal Railroad Administration, RRS-15, 1200 New Jersey Avenue, SE, Washington, DC 20590, with a written description of the technical aspects of any locomotive image recording system installed to comply with this section.

(1) The written description must include information specifically addressing the image recording system's:

(i) Minimum 12-hour continuous recording capability;

(ii) Crashworthiness; and

(iii) Post-accident accessibility of the system's recordings.

(2) The railroad must submit the written statement not less than 90 days before the installation of such image recording system, or, for existing systems, not less than 30 days after **[EFFECTIVE DATE OF FINAL RULE]**.

FRA estimates that railroads will submit approximately 31 written descriptions/statements under the above requirement. It is estimated that it will take approximately 50 hours to complete each written description/statement. Total annual burden for these requirements is 1,550 hours.

Respondent Universe:	31 Railroads
Burden time per response:	50 hours
Frequency of Response:	On occasion
Annual number of Responses:	31 written descriptions/statements
Annual Burden:	1,550 hours
Annual Cost	\$113,150 (\$73 x 1,550 hrs.)

**Calculation:** 31 written descriptions/statements x 50 hrs. = 1,550 hours

(3) The FRA Associate Administrator for Railroad Safety and Chief Safety Officer will review a railroad's submission and may disapprove any recordings systems that do not meet the requirements of this section. FRA will notify the railroad of its disapproval in writing within 90 days of FRA's receipt of a railroad's written submission, and shall specify the basis for any disapproval decision.

*FRA estimates that zero (0) railroad submissions will be disapproved by FRA since agency staff will be working closely to implement the requirements of this proposed rule. Consequently, there is no additional burden associated with this requirement.*

*(i) Removal of device from service and handling for repair.* Notwithstanding the duty established in paragraph (a) of this section to equip certain locomotives with image recording devices, a railroad may remove from service an image recording device on a locomotive in commuter or intercity passenger service, and must remove the device from service if the railroad knows the device is not properly recording. When a railroad removes a locomotive image recording device from service, a qualified person shall record the date that the device was removed from service on Form FRA F6180-49A, under the REMARKS section. A locomotive on which an image recording device has been taken out of service as provided in this paragraph may remain as the lead locomotive only until the next calendar-day inspection required under § 229.21. A locomotive with an inoperative image recording device is not deemed to be in improper condition, unsafe to operate, or a non-complying locomotive under §§ 229.7 and 229.9.

FRA estimates that approximately 20 notations on Form FRA F6180-49A, under the REMARKS section, will be made each year under the above requirement when a locomotive on which an image recording device has been taken out of service. It is estimated that it will take approximately 15 minutes for a qualified person to take the

image recording device out of service and make the necessary date notation. Total annual burden for these requirements is five (5) hours.

Respondent Universe:	31 Railroads	
Burden time per response:	15 minutes	
Frequency of Response:	On occasion	
Annual number of Responses:	20 notations	
Annual Burden:		5 hours
Annual Cost		\$305 (\$61 x 5 hrs.)

**Calculation:** 20 notations x 15 min. = 5 hours

Total annual burden for this entire requirement is 53,928 hours (17 + 49,440 + 960 + 1,956 + 1,550 + 5).

The total annual **burden requested** for this entire information collection is **210,915 hours**, and **9,240,241 responses**. The total dollar equivalent cost of these hours amounts to **\$11,470,639**.

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

Besides the burden listed in the answer to question number 12 above, there will be the cost of the locomotive image and audio recordkeeping devices as detailed in the regulatory impact analysis (RIA) accompanying this proposed rule. A system will need at least two cameras, one-inward facing and one outward-facing. However, FRA bases its estimates on a more practical design using four cameras, two inward-facing and two outward-facing. FRA assumes that the cameras would be connected by cable to an image recording box, and only on passenger locomotives that the recording box is connected to a crashworthy memory module. Based on Subject Matter Expert (SME) knowledge, FRA estimated the cost of image recording devices at \$10,000. This cost includes the cost of installation within the locomotive. This cost represents a conservative estimate based on limited information.

In 2015, Amtrak reported the image recording device cost was \$20,000 per locomotive. FRA believes the cost incurred by Amtrak most likely represents a higher than average cost due to the nature of Amtrak traffic on the Northeast Corridor as well as the expedited installation that Amtrak undertook. FRA used the crashworthiness costs estimated for locomotive event records under section 229.135 to estimate the cost of crashworthiness for the memory module for image recording devices. Based on section 229.135, the cost of crashworthiness is estimated at \$2,000 per locomotive. In a recent report, Transport Canada also found the per locomotive cost to install image recording systems was \$10,000 and the added protection from crashworthiness would cost approximately \$2,000. In addition, the crashworthiness standards estimated for image recording devices are the same standards currently being met by manufactures for systems such as PTC or

locomotive event recorders. Furthermore, for those railroads that have already begun to install image recording devices, it is likely the same crashworthiness standards are being applied to the memory modules, even in absence of this rule. The FAST Act requires the memory module for image recording devices on passenger locomotives to be crashworthy, and the proposal would require those modules on passenger locomotives to meet the crashworthiness requirements of part 229, appendix D.

As noted above, FRA estimates the image recording systems will cost \$10,000 for the cameras and recording system and \$2,000 to make the memory crashworthy. Passenger locomotives generally have tighter space constraints than freight railroads, and are generally owned by quasi-public or public entities with complex procurement processes. These procurement processes usually require formal budgeting of any procurement, which raises costs compared to privately held entities operating freight locomotives

FRA estimates that annual maintenance of the cameras and recording system will be similar to the costs in the Locomotive Event Recorder final rule, which estimates these costs at \$432 per year for each unit. The \$432 annual maintenance cost is made up of the hourly wage of the employee who is conducting the maintenance, factoring in the time it would take to conduct the maintenance, times the frequency at which the maintenance would need to be conducted. This analysis assumes the annual salary of the employee conducting the maintenance will be approximately \$54 per hour and that it would take two hours to perform the maintenance, resulting in a cost of \$108 per maintenance inspection. It is assumed that the maintenance would need to be conducted quarterly, resulting in a total annual maintenance cost of approximately \$432.

In addition to the annual maintenance costs, FRA is assuming a replacement rate of approximately 1 percent of the phase in inventory of cameras, which includes the parts for the annual maintenance as well as accounts for any instances where the cameras would need to be replaced. FRA believes that a replacement rate, which is equivalent to five cameras per year, is realistic given how the cameras will be installed and the overall life expectancy of the equipment. These costs are reflected in Table 2.1B below. (*Note: FRA is requesting comments from the public regarding the estimated maintenance costs and maintenance schedule.*)

Table 2.1A. Image Recorder Unit Costs and Units Affected

	All Locomotives	Non-Compliance Without Rule	Unequipped Locomotives	Equipment Cost	First Year Cost
Commuter	3595	65%	2,337	\$10,000	\$5,841,875 <sup>52</sup>
Amtrak	521	0%	0		\$0
Total	4116	57%	2,346		\$5,841,875

<sup>52</sup> 2,337 (locomotives) \* \$10,000 = \$23,370,000 / 4 = \$5,842,500 per year

Table 2.1B. Image Recorder (Excluding Crashworthiness) Costs by Year on Passenger Locomotives

Year	Camera Cost and Installation	Maintenance	Total Annual Cost	Discounted at 7%	Discounted at 3%
1	\$5,842,500	\$0	\$5,842,500	\$5,842,500	\$5,842,500
2	\$5,842,500	\$563,217	\$6,405,717	\$5,986,651	\$6,219,143
3	\$5,842,500	\$815,613	\$6,658,113	\$5,815,454	\$6,275,910
4	\$5,842,500	\$1,068,009	\$6,910,509	\$5,641,034	\$6,324,095
5	\$0	\$1,068,009	\$1,068,009	\$814,779	\$948,912
6	\$0	\$1,068,009	\$1,068,009	\$761,476	\$921,274
7	\$0	\$1,068,009	\$1,068,009	\$711,659	\$894,441
8	\$0	\$1,068,009	\$1,068,009	\$665,102	\$868,389
9	\$0	\$1,068,009	\$1,068,009	\$621,591	\$843,096
10	\$0	\$1,068,009	\$1,068,009	\$580,926	\$818,540
Total	\$23,370,000	\$8,854,893	\$32,224,893	\$27,441,173	\$29,956,299

Thus, the 10-year costs for the image recording systems on passenger locomotives would be \$27,441,173, discounted at 7 percent, or \$29,956,299, discounted at 3 percent. These totals do not include the costs for crashworthiness or the data storage required under proposed section 229.136(f)(2), which are included below.

#### Costs of Crashworthiness

FRA believes about 35 percent of the non-Amtrak passenger locomotive fleet is or will be equipped with image recording devices without the proposed rule. The locomotives that would have image recording devices equipped without the rule would also most likely already have crashworthy memory units installed as that is currently what is available to the industry. Crashworthy memory devices are required for both the locomotives' PTC systems as well as event recorders; therefore, the industry, by and large, supplies memory units that would meet the crashworthiness requirement. The assumption that current locomotives that are equipped with image recording devices are also equipped with crashworthy memory is based upon SME knowledge, and FRA requests comments on the validity of this assumption. Based on Working Group discussions, FRA field staff observations and SME knowledge, FRA estimates 35 percent

of commuter railroads' single cab locomotives and 100 percent of Amtrak single cab locomotives are, or will be, equipped with image recording devices that will have crashworthy memory units. As discussed above, FRA estimates that it will cost an additional \$2,000 to make a recording memory module crashworthy on a passenger locomotive. Based on SME knowledge, FRA also estimates that annual maintenance on the crashworthy memory module will be 5 percent of the installed base.

Table 2.2A. Added Cost of Crashworthiness

	All Locomotives	Non-Compliance Without Rule	Unequipped Locomotives	Crashworthiness Cost	First Year Cost
Commuter	3,595	65%	2,337	\$2,000	\$1,168,375
Amtrak	521	0%	0		\$0
Total	4,116		2,337		\$1,168,375

Table 2.2B Added Maintenance Cost of Crashworthiness

	All Locomotives	Non-Compliance Without Rule	Unequipped Locomotives	Crashworthiness Cost	First Year Cost
Commuter	3595	65%	2,337	\$100	\$58,419
Amtrak	521	0%	0		\$0
Total	4116		2,337		\$58,419

Annual Cost

Camera Purchase and Installation = \$5,841,875

Maintenance = \$ 58,419

Crashworthiness = \$1,168,375

**TOTAL COST TO RESPONDENTS = \$7,068,669**

**Cost Savings from Image Recording to Conduct Unannounced Observations**

Image recording systems can be used to perform existing operational tests at much lower costs. Currently, railroads must test their engineers by riding along with them during unannounced observations at least once per year. This can be expensive when a great deal of travel is required. FRA assumes, based on railroad experiences of FRA staff who have conducted these kinds of tests when they worked for railroads in their previous employment, that for each operational test the supervisor earns the same hourly pay as an average engineer (supervisors earn higher salaries, but are paid by annual salary, so the hourly cost is about the same) and at a cost to

employ equal to 75 percent of their wages to account for any fringe benefits.<sup>53</sup> FRA assumes that without image recorders each test would take an average of one hour to perform, and with the video recorders each test would take 30 minutes to perform—for a savings of 0.5 hour per test—and that each employee will receive at least one test per year. Using the fully burdened salary of \$95 per hour and an average of 0.5 hour to conduct each test results in a cost savings of \$47 per test. Thus, the potential annual savings would be **\$160,659** per year for unannounced observations.<sup>54</sup> The 10-year total cost savings would be \$1,046,734, discounted at 7 percent, or \$1,250,912, discounted at 3 percent.

Table 2.5A Unannounced Observation

	Engineers	Units
Number of employees	3,400	
Engineer Salary	\$95	per hour
Average time to conduct test without cameras	1	hour
Time reduction for retrieving data	0.5	hour
Cost for one-hour test using cameras vs. physical observation	\$47	
Cost savings from using cameras	\$160,659	per year

**TOTAL NET COST TO RESPONDENTS = \$6,908,010**

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

Approximately, 40 man-hours are spent annually reviewing the reports and an additional 15 hours in processing the respondents' submissions. This excludes time spent doing routine compliance and enforcement activities. Multiplying 40 hours times the estimated \$100 per hour (includes 75% overhead) equals \$4,000, which is the cost of reviewing the reports. An additional \$1,500 is spent annually for processing the reports [\$100 per hour (includes 75% overhead)]. Total annual cost to the Federal government is **\$5,500**.

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

The burden for this revised collection of information has decreased by **4,580,699 hours** and by **179,350,983 responses**. The decrease in burden is due both to **program changes** and **adjustments**. The table below depicts all burden hour and burden response **program changes**.

<sup>53</sup> The 75% wage rate is taken from a 2002 AAR document entitled "AAR Freight Car Repair Labor Rate"

<sup>54</sup> Calculation: (\$47 \* 3,400) = \$160,659



**TABLE FOR PROGRAM CHANGES**

Part 217Sec./ Part 218 Sec.	Responses & Avg. Time (Previous Submission)	Responses & Avg. Time (This Submission)	Burden Hours (Previous Submission)	Burden Hours (This Submission)	Difference (plus/minus)
217.9 (b)(3)(i) – <b>New Requirement</b> – Railroads utilizing inward facing locomotive image and in-cab audio recording devices to conduct operational tests/inspections must adopt and comply with procedures to ensure employees are randomly tested	N/A	40 procedures 24 hours	N/A	960 hours	+ 960 hours + 40 responses

217.136– <b>New Requirements</b> - (a)(3)(i) – Notations in “Remarks” section of locomotive cab Form FRA F 6180.49A of presence of image & audio recording system -(a)(4) --Recording of most recent 12 hours of operations by locomotive image recording system (f)(1) – Handling of Recordings: Chain of Custody Procedures (f)(2) – Accident/ Incident Handling: Preserved Accident Data Recordings (g) – Provision by passenger RR to FRA of written description of any technical aspects of any locomotive image recording system (g) – Removal of locomotive recording device from service and handling for repair: Notation of Form FRA F 6180.49A in “Remarks” section of date the device was removed from service	N/A	4,120 notations 15 seconds	N/A	17 hours	+ 17 hours + 4,120 resp.
	N/A	4,120 recording 12 hours	N/A	49,440 hours	+ 49,440 hours + 4,120 resp.
	N/A	20 procedures 48 hours	N/A	960 hours	+ 960 hours + 20 responses
	N/A	163 saved recordings 12 hours	N/A	1,956 hours	+ 1,956 hours + 163 resp.
	N/A	31 written descriptions 50 hours	N/A	1,550 hours	+ 1,550 hours + 31 responses
	N/A	20 notations 15 minutes	N/A	5 hours	+ 5 hours + 20 responses

**Program changes** increased the burden by **54,888 hours** and increased the number of **responses** by **8,514**.

### **TABLE FOR ADJUSTMENTS**

Part 217Sec./ Part 218 Sec.	Responses & Avg. Time (Previous Submission)	Responses & Avg. Time (This Submission)	Burden Hours (Previous Submission)	Burden Hours (This Submission)	Difference (plus/minus)
217.9(d) – Records of operational tests/ inspections	9,120,000 record 5 minutes	9,120,000 record 1 minutes	760,000 hours	152,000 hours	- 608,000 hours 0 responses

217.11(a) – RR Periodic instruction of employees on operating rules:	130,000 instr. employees 8 hours	0 employees 0 hours; <i>already fulfilled</i>	1,040,000 hrs.	0 hours	- 1,040,000 hrs. - 130,000 resp.
218.95(a)(5) – RR Instruction, training, examination: employee records	98,000 records 5 minutes	98,000 records 1 minute	8,167 hours	1,633 hours	- 6,534 hours 0 responses
218.97(d)(4) – Employee request for further review of challenge	3 further reviews 15 minutes	3 written requests + 3 further reviews 15 minutes + 15 minutes	1 hour	2 hours	+ 1 hour + 3 responses
218.99(b) – Job briefings	180,000 briefing 1 minute	<i>Usual and customary practice</i>	3,000 hours	0 hours	- 3,000 hours - 180,000 resp.
218.99(b)(3) – Point protection: Determinations and conveyances	87,600,000 determinations + 87,600,000 conveyances 1 minute + 1 minute	<i>Usual and customary practice/ procedure</i>	2,920,000 hours	0 hours	- 2,920,000 hrs. -175,200,000 responses
218.99(c) – Verbal confirmations	876,000 verbal confirmations 1 minute	<i>Usual and customary practice</i>	14,600 hours	0 hours	- 14,600 hours - 876,000 resp.
218.99(d) – Determination track is clear	876,000 determinations 1 minute	<i>Usual and customary practice</i>	14,600 hours	0 hours	- 14,600 hours - 876,000 resp.
218.99(e) – Dispatcher authorized train movements	30,000 authorizations 1 minute	<i>Usual and customary practice</i>	500 hours	0 hours	- 500 hours - 30,000 resp.
218.103(b) – Job briefings	1,125,000 briefings 1 minute	<i>Usual and customary practice</i>	18,750 hours	0 hours	- 18,750 hours - 1,125,000 responses
218.103(c) – Job briefings	60,000 briefings 1 minute	<i>Usual and customary practice</i>	1,000 hours	0 hours	- 1,000 hours - 60,000 resp.
218.105(c)(2) – Employee reports + switch position conveyances	100,000 reports + 100,000 conveyances 1 minute + 1 minute	<i>Usual and customary practice</i>	3,333 hours	0 hours	- 3,333 hours - 200,000 resp.
218.108(c/d) – Acknowledgements and verbal confirmations	60,000 acknowledge- ments + 60,000 confirmations 30 seconds + 5 seconds	<i>Usual and customary practice</i>	583 hours	0 hours	- 583 hours - 120,000 resp.
218.109 – Job briefings	562,500 briefing 30 seconds	<i>Usual and customary</i>	4,688 hours	0 hours	- 4,688 hours - 562,500 resp.

		<i>practice</i>			
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Adjustments above decreased the burden amount by **4,635,587 hours**, and decreased the number of responses by **179,359,497**.

The current OMB inventory for this information collection exhibits a burden total of **4,791,614 hours** and **188,591,224 responses**, while the present submission reflects a burden total of **210,915 hours** and **9,240,241 responses**. Hence, there is a total burden decrease of **4,580,699 hours** and **179,350,983 responses**.

The cost to respondents has increased by **\$6,908,010** from the previous submission. The increase in cost is due to a **program change** resulting from the cost of locomotive recording devices mandated by the new requirements in this final rule minus the expected cost savings from unannounced observations and banner test equivalents ( $\$7,068,010 - \$160,659 = \$6,908,010$ ).

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

There is no tabulation or publication of responses. This information is used by specialists in the Office of Safety to determine the level of safety of each railroad's operations. Persons outside FRA's Office of Safety use the material for research and development purposes.

**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.

### Meeting Department of Transportation (DOT) Strategic Goals

This information collection supports the top DOT strategic goal, namely transportation safety. Without this collection of information, rail safety throughout the U.S. might be seriously hindered. Specifically, the number of accidents/incidents and the severity of injuries might increase because railroads' code of operating rules, timetables, and timetable special instructions did not conform to Federal safety laws and regulations. Also, the number of accidents/incidents and the severity of injuries might increase because railroad employees were not familiar with the railroad's current operating rules, timetables, and timetable special instructions, and consequently engaged in unsafe practices.

The collection of information promotes safety by providing FRA an opportunity to review and monitor railroads operating rules and any amendments thereto to ensure full compliance with Federal laws and regulations. The collection of information promotes safety by providing FRA oversight to ensure that railroads conduct the required operational tests and inspections. Moreover, the collection of information promotes safety by ensuring that railroad workers are properly trained concerning the railroad's current operating rules, timetables, and timetable special instructions. Periodic training reduces the likelihood that workers will not understand current operating rules or engage in unsafe practices.

The collection of information, notably the written summaries on operational tests and inspections required of railroads with more than 400,000 man-hours per year, further enhances rail safety by providing a valuable resource that FRA and other investigating agencies can use in determining the cause(s) of accidents/incidents. These records provide valuable information such as the number, type, and result of each operational test and inspection that was conducted (as required under § 217.9(a)). By accurately determining the cause(s) of accidents/incidents, FRA and the railroad industry can take measures to reduce the likelihood of similar events occurring in the future.

In summary, this collection of information enhances railroad safety by providing an additional layer of protection through the agency's close monitoring and full awareness of the railroads' current operating rules and practices. It furthers DOT's goal of promoting the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

In this information collection, as in all its information collection activities, FRA seeks to do its utmost to fulfill DOT Strategic Goals and to be an integral part of One DOT.