# INFORMATION COLLECTION SUPPORTING JUSTIFICATION Inspection Standards for Steam Locomotives OMB No. 2130-0505

### Summary of Submission

- This renewal submission is a request for a <u>revision</u> to the previous approval granted by OMB on August 13, 2008, and which expires on August 31, 2011.
- This information collection submission is entirely associated with the current rule at 49 CFR Part 230.
- The total number of burden hours requested for this submission is **18,866 hours.**
- The total number of burden hours previously approved was **314 hours**.
- Adjustments <u>increased</u> the burden by a total of **18,552 hours**.
- There are no **program changes** at this time.
- The total number of responses requested is **4,868**.
- **\*\***The answer to question **number 12** itemizes the hourly burden associated with each requirement of this rule (See pp. 13-30)

\*\*\*\*\* The burden for this information collection has increased greatly from the last approved submission because that submission – and the previous submissions before that one – did not fully take into account the complex and time consuming nature of the required steam locomotive inspections under this Part. Instead, that submission – and previous submissions to that – only calculated the minimal burden associated with completing the required forms. The previous program specialist relied on for past agency estimates did not have the depth of knowledge and understanding as the current specialist recently consulted whose wealth of experience, knowledge, and overall expertise has led to his recent selection as the FRA Motive Power and Equipment (MP&E) branch chief.

# 1. <u>Circumstances that make collection of the information necessary</u>.

### **Background**

FRA issued new Steam Locomotive Inspection and Maintenance Standards in 1999 in

order to update and enhance its steam locomotive regulatory program. In recognition of the reduced frequency of use of steam locomotives in today's transportation system, the revised standards, which reflected the consensus recommendations of the Railroad Safety Advisory Committee's (RSAC) Tourist and Historic Working Group (THWG), relaxed certain inspection requirements and tightened others. Significant changes included the following: (1) The creation of a" service-day" inspection system that directly relates inspection time periods to the actual use of the steam locomotive; (2) The elimination, with certain exceptions, of waivers for steam boilers, steam locomotives and their appurtenances, except as provided in 49 CFR Part 211; (3) The inclusion of allowances which encourage the use of new technologies, such as non-destructive testing, for boiler testing and inspections; and (4) The imposition of qualification requirements for individuals making certain repairs to steam locomotives, steam locomotives boilers, and steam locomotive appurtenances. Certain of the 1978 inspection standards have remained substantively intact but were relocated to new sections and given new section numbers. Due to the magnitude of the changes made, these recently issued standards replaced the 1978 standards in their entirety.

The Locomotive Boiler Inspection Act was passed by a Congress concerned over the ever-increasing rate of serious injury and death on the nation's railroads in the early 1900s. In his annual message to Congress in 1910, President Taft noted the need for regulation of the steam locomotive industry:

The protection of railroad employees from personal injury is a subject of the highest importance and demands continuing attention . . . It seems to me that with respect to boilers a bill might well be drawn requiring and enforcing by penalty a proper system of inspection.

*Congressional Record*, December 6, 1910, p.33. At that time, the only rule or regulation governing the inspection and maintenance of steam locomotives was the Ash Pan Act, 45 U.S.C. 17 (1908), repealed Pub. L. 97-468 (1983), which prescribed the method for attaching ash pans to steam locomotive boilers. Acting in response to President Taft's speech, Congress passed the Locomotive Boiler Inspection Act (LBIA) on February 17, 1911. The LBIA, enactment of which was initially opposed by locomotive owners and operators, brought all steam locomotive boilers under Federal jurisdiction and established the Bureau of Locomotive Inspections.

The LBIA, which became effective on July 1, 1911, was limited in scope to steam locomotive boilers. Despite its restricted coverage, the LBIA had an immediate, positive impact on safety with the number of incidents caused by the failure of a boiler or any of its appurtenances declining sharply after its passage. However, the number of incidents involving failures of locomotive parts other than boilers and related appurtenances continued to increase, and railroad labor soon appealed to Congress to expand the LBIA to cover the entire steam locomotive and tender and all its parts and appurtenances. Although the railroad owners and operators were strongly opposed to this expansion in

the Act's coverage, a bill amending the LBIA to incorporate the requested changes was passed by Congress and signed into law by President Woodrow Wilson on March 4, 1915.

When the LBIA became effective in 1911, it required each railroad subject to the Act to file copies of its rules and instructions for the inspection of locomotive boilers. A review of the 170 rules and instructions submitted (out of approximately 2,200 railroads in the country at that time) disclosed that these rules were either substantially similar, or identical, to those promulgated by the Master Mechanics' Association. These rules, in combination with the 1915 amendments to the LBIA, formed the basis for the Interstate Commerce Commission (ICC) rules on inspection and maintenance of steam locomotives and tenders (rules that, with some modification, continue in effect to this day). When the FRA came into existence in 1967 as part of the newly formed DOT, it adopted all ICC rules, interpretations, and instructions pertaining to railroads that were published in the <u>Federal Register</u> and incorporated into the Code of Federal Regulations (CFR) in December of 1968. Since then, the rules have been updated and amended periodically. Although the steam locomotive regulations were removed from the CFR in 1980, FRA has continued to enforce them.

Presently, there are approximately 150 steam locomotives in operation nationwide. Most of them are used in tourist or historic service on an intermittent, seasonal basis. Several years ago, the Engineering Standards Committee (ESC), a task group consisting of steam locomotive operators of the National Board of Boiler and Pressure Vessel Inspectors, petitioned FRA to change the then current rules on inspection and maintenance of steam locomotives to more realistically reflect the current use and conditions of service for today's steam locomotives. The agency agreed to work with the ESC to consider revisions to these standards. After FRA established the Railroad Safety Advisory Committee (RSAC) in 1996, the subject of steam locomotive inspection and maintenance was identified as one fit for collaborative rulemaking. Accordingly, the agency tasked the RSAC with the formal revision of steam locomotive inspection standards on July 21, 1996. It was also decided that the ESC, and the FRA representatives working with it, would become a task force assigned to the RSAC's Tourist and Historic Working Group (THWG).

During the July 24, 1996, RSAC meeting, the agency charged the committee with recommending revisions to the regulations governing steam-powered locomotives (49 CFR Part 230) in order to promote the safe operation of tourist and historic rail operations, including "such additions and deletions as may be warranted by appropriate data and analysis." In its Task Statement (Task No. 96-5) to RSAC, FRA instructed the Committee to refer this task to the pre-existing THWG, which it successfully did. The following organizations comprise the Tourist and Historic Working Group:

Association of American Private Railcar Owners American Short Line and Regional Railroad Association Association of American Railroads Association of Railway Museums Brotherhood of Locomotive Engineers and Trainmen Federal Railroad Administration Tourist Railroad Association Inc.

The THWG voted during its April 1996 meeting to officially endorse the Engineering Standards Committee (ESC), which had been studying these issues outside of the RSAC arena, and to have it serve as a Task Force reporting to the THWG. The Steam Task Force (Task Force) was composed of knowledgeable representatives from the following organizations:

Valley Railroad Company Durango & Silverton Narrow Gauge Union Pacific Railroad Strasburg Railroad Hartford Steam Boiler Inspection & Insurance Company National Board of Boiler and Pressure Vessel Inspectors ABB/Combustion Engineering Smithsonian Institution Federal Railroad Administration

In addition, a locomotive engineer and several locomotive experts now working as consultants participated in the proceedings.

On September 19, 1997, the THWG communicated to the agency group members' unanimous agreement that the Task Force's proposed recommended rule text revisions to Part 230 should be forwarded to the RSAC. On January 16, 1998, both the Task Force and THWG reached consensus that the proposed preamble should be included in the package presented to RSAC. The RSAC was presented with the entire package during its January 27, 1998, meeting. The RSAC considered this proposal and then made consensus recommendations to the FRA Administrator in February 1998. The final rule issued on November 17, 1999, reflected those recommendations, consistent with applicable laws and Presidential guidance.

The requirements in this rule focus on reducing/eliminating hazards that are unique to steam operated locomotives. Consequently, this rule serves to enhance railroad safety. Moreover, the new requirements further FRA's main mission, which is to promote, and enforce railroad safety throughout the U.S. railroad system.

### 2. <u>How, by whom, and for what purpose the information is to be used</u>.

The information collected is used by FRA to ensure that tourist/historic railroads and other locomotive owners and/or operators covered by this Part comply with the

requirements of this rule. Specifically, FRA reviews waiver requests to determine whether it is safe and in the public interest to grant exceptions for railroads and other steam locomotive owners and/or operators to any of the provisions of this rule. FRA inspectors review required inspection forms – FRA Form No. 1, FRA Form No. 2, FRA Form No. 3, and FRA Form No. 4 – to verify that required Daily, 31 Service Day, 92 Service Day, Annual, and 1472 Service Day steam locomotive inspections and tests are carried out by qualified personnel and that these locomotives are indeed "safe and suitable "to operate/be placed in service. Moreover, FRA inspectors ensure that, within 10 days of conducting the 31 Service Day and 92 Service Day inspections and within 30days of completing the 1472 Service Day inspection, the steam locomotive owner and/or operator files, for each locomotive inspected, a report of the inspection (FRA Form No. 1 and FRA Form No. 4, respectively) in the place where the steam locomotive is maintained and with the FRA Regional Administrator for that region. FRA inspectors review FRA Form No. 5 for each steam locomotive currently in service to determine the number of service days the steam locomotive has accrued since the last 31, 92, Annual, and 1472 service day inspections.

FRA inspectors review alteration and repair reports (FRA Form No. 19) for steam locomotive boilers when an alteration is made to a steam locomotive boiler or whenever welded/riveted repairs are made on unstayed or on stayed portions of a steam locomotive boiler to ensure that boiler repairs and alterations are detailed and done properly.

The information is used by tourist or historic railroads and by locomotive owners and/or operators to safely move non-complying steam locomotives and to protect their employees. In particular, prior to movement, the steam locomotive owner and/or operator is required to determine that it is safe to move the locomotive, determine the maximum speed and other restrictions necessary for safely conducting the movement, and notify in writing the engineer in charge of towing the locomotive consist, as well as other crew members in the cabs, of the presence of the non-complying steam locomotive and the maximum speed and other movement restrictions. The same written notification requirements apply if a steam locomotive develops a non-complying condition en route. Thus, by looking at required tags on either side of the non-complying locomotive, employees handling this equipment can take appropriate and necessary measures to protect themselves.

Further, the information is used by tourist or historic railroads and by locomotive owners and/or operators to provide a record for each day a steam locomotive is placed in service as well as a record that required steam locomotive inspections are completed. While some tourist railroads own and operate their own locomotives, frequently steam locomotives are owned and/or operated by entities other than the railroads on whose line they operate. Presently, there are roughly 150 steam locomotives covered by this rule. They operate mostly on a seasonal basis, averaging approximately 90 service days per year. The current rule provides clear guidance for all on what needs to be done to keep steam locomotives "safe and suitable" for service. Finally, the collected information is used by FRA during accident/incident investigations, and provides an invaluable resource in determining the condition of the steam locomotive and possible cause(s) of the accident/incident.

### 3. How, by whom, and for what purpose the information is to be used.

FRA strongly endorses and highly encourages the use advanced information technology and other automated collection techniques, wherever possible, to reduce burden on respondents. Currently, there are few automated reporting systems, if any, in use among tourist/historic railroads and other steam locomotive owner/operators. To date, steam locomotive railroads and other owner/operators have furnished FRA with most of the required information by periodically filing reports using paper forms. FRA has made these forms available on its Website so that they are readily available and can be readily downloaded by users. FRA would like to see these reports filed and stored electronically in the future, provided railroads and other owner/operators have the capability to do so.

It should be noted that the burden for this collection is fairly minimal.

### 4. <u>Efforts to identify duplication</u>.

This information to our knowledge is not duplicated anywhere.

Similar data are not available from any other source.

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

In order to provide flexibility and to minimize the cost burden of the requirements of this rule, FRA established a staggered implementation scheme. This scheme was designed to assist those owners and/or operators who otherwise might be adversely affected by the changes being implemented. Specifically, FRA decided to adopt the date of publication of the Notice of Proposed Rulemaking (NPRM) as the date of the three (3) year period for which special consideration will relate back from. As a result, any locomotive owner and/or operator whose locomotive was fully or partially in compliance with the 1427 service day requirements in § 230.17 between September 25, 1995 and September 25, 1998 could petition FRA for special consideration. (*Note: Since this period has expired, owners and/or operators now have the option to file a petition for waiver rather than a petition for special consideration*.)

Under the old (1978) standards, steam locomotive boilers were required to be inspected at various time periods that were linked to an annual calendar, regardless of the amount of actual usage the locomotive incurred. Under the new inspection regime of the current rule, however, required locomotive inspections are based on the number of "service days" a steam locomotive has accrued, with various intermediate calendar inspection

requirements retained to ensure an adequate level of safety. The effect of this reduction in the need for frequent inspections and, correspondingly, in the paperwork associated with them, has been to decrease the cost and paperwork burdens experienced by owners and/or operators of steam locomotives. The largest impact and greatest savings have occurred on steam locomotives that transition from the old rule (1978 standards) to the current rule.

It should be noted that the current rule resulted from a collaborative process where the affected parties were thoroughly involved. Also, it is important to mention that, on every proposed change, the Steam Task Force of the Tourist and Historic Working Group (THWG) evaluated and re-evaluated numerous alternatives.

Finally, it should again be pointed out that the burden for this information collection is fairly minimal.

### 6. <u>Impact of less frequent collection of information</u>.

If this information were not collected or collected less frequently, rail safety relating to the operation and use of steam locomotives might be seriously jeopardized. Specifically, without this collection of information, FRA could not perform its Congressionally mandated oversight function to ensure that railroads in this country are operated in a safe manner. The operation of steam locomotives presents potential hazards both to the crews who run them and to the public who ride them. The railroad incident on the Gettysburg Passenger Services' steam locomotive in June 1995 illustrates the inherent risks associated with this type of locomotive. The crown sheet of the firebox failed, resulting in the instantaneous release of steam through the firebox door and into the locomotive cab. During this episode, the steam locomotive engineer and two firemen were seriously burned. Steam locomotives which are not properly operated and maintained may present even greater potential dangers, such as derailments and boiler explosions, that could result in significant injuries and possibly fatalities. Thus, it is imperative that they be carefully monitored for safety compliance.

Without this collection of information, FRA would not have the means to oversee entities, including tourist and historic railroads, which own and operate steam locomotives to verify that they run and maintain these units properly so as to be "safe and suitable for service." The information collected under this rule assists FRA in a number of ways to carry out its main mission. FRA reviews waiver requests to see where it might be appropriate and permissible to grant steam locomotive owners and/or operators a delayed implementation of, or perhaps even dispense with, any requirement of this regulation or of any requirement of any order or regulation implementing the Locomotive Boiler Inspection Act and still maintain satisfactory levels of rail safety. FRA requires that non-complying or defective steam locomotives, including those developing a noncomplying condition en route, be tagged before movement with specific information so as to ensure that the locomotive engineer and train crew members are properly notified and are not needlessly endangered, and to allow the safe movement of these types of locomotives.

Without the required forms, FRA would have no way to track the status or condition of steam locomotives in this country. FRA reviews the required inspection forms to confirm that steam locomotives are "safe and suitable for service." Specifically, FRA reviews the required Form 1s for the 31 Service Day inspection and for the 92 Service Day inspection, and the Form 3s and Form 4s for the annual and 1472 Service Day inspections to ensure that they are completed by a competent individual and to verify that days in service are counted and recorded. Regarding the 31 Service Day inspection, all 31 service day inspection items and all daily inspection items must be completed for each steam locomotive that is in operation. Regarding the 92 Service Day inspection, all daily, all 31 service day, and all 92 service day items must be completed. The required Form 1 must be filed for each locomotive inspected within 10 days of conducting the 92 service day inspection by the steam locomotive owner and/or operator in the place where the locomotive is maintained and with the FRA Regional Administrator for that region.

Regarding the annual inspection, all daily, all 31 service day, all 92 service day, and all annual inspection items must be completed. Regarding the 1472 service day inspection, all annual and 5<sup>th</sup> annual inspections requirements, as well as any items required by the steam locomotive owner and/or operator and/or the FRA inspector, must be completed. For the 31 service day inspection, the 92 service day inspection, and the annual inspection, not less frequently than every 31 service day inspection, boilers must be thoroughly washed and those boilers equipped with fusible plugs must have them removed and cleaned of scale each time the boiler is washed. FRA confirms that these two activities are performed and noted either on Form 1 or Form 3. Additionally, for these three required inspections, FRA Regional Administrators or their delegates may attend these inspections by requiring timely notification by the steam locomotive owner and/or operator. The steam locomotive owner and/or operator must then provide them a scheduled date and location for inspection. This common notification provision then provides an additional layer of supervision that FRA can use in cases where the agency officials believe it appropriate or necessary.

Without this collection of information, FRA would be unable to track changes when an alteration is made to a steam locomotive boiler, or whenever welded/riveted repairs are made on unstayed or stayed portions of a steam locomotive boiler (through FRA Form No. 19). The required form must be attached to and maintained with FRA Form No. 4 until such time as a new Form No. 4 reflecting the alteration is submitted to the appropriate FRA Regional Administrator. These forms/reports must be filed and maintained for the life of the boiler. Thus, FRA inspectors can keep close tabs on locomotive boilers so that improper or unsafe alterations are not performed.

Without this collection of information, FRA would have no mechanism to review written requests by locomotive owners and/or operators who want to perform welded repairs and

alterations to the boiler and to perform riveted repairs and alterations to stayed or unstayed portions of the boiler prior to such work being done and so would be unable to ensure that they are properly done, i.e., that they are performed in accordance with established railroad practices or an accepted national standard for boiler repairs. In sum, all the information collected provides FRA with a necessary and useful means that it utilizes to make certain that tourist and historic railroads and other steam locomotive owners and/or operators properly run and maintain their steam locomotives so that they are "safe and suitable for service" and so that accident/incidents – and the casualties which accompany them – are kept to the lowest minimum possible.

### 7. <u>Special circumstances</u>.

The current rule requires that the steam locomotive and its tender and appurtenances be inspected each day that they are offered for use to determine that they are safe and suitable for service. The changes also require that the results of the daily inspection be entered on a FRA Form No. 2.

Additionally, the current rule requires that a qualified individual perform a 31 service day inspection after the steam locomotive has accrued 31 "service days." The requirements of the 31 service day inspection are the same as the old rule's monthly inspection. It should be noted that the average steam locomotive under the old rule did not have 12 monthly inspections per year because monthly inspections are only required for each month that a steam locomotive is in service (fired up). Within 10 days of conducting the 31 service day inspection, the steam locomotive owner/operator must file a report, for each locomotive inspected, on FRA Form No. 1, in the place where the steam locomotive is maintained and with the appropriate FRA Regional Administrator.

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

# 8. <u>Compliance with 5 CFR 1320.8</u>.

As required by the Paperwork Reduction Act of 1995, FRA published a notice in the <u>Federal Register</u> on November 14, 2011, soliciting comment on this particular information collection. *See* 76 FR 70532. FRA received no comments either from the public or the railroad community regarding the information collecting activities associated with the requirements of this rule.

# **Background**

Pursuant to section 553 of the Administrative Procedure Act, FRA published a Notice of Proposed Rulemaking (NPRM) in the <u>Federal Register</u> on September 25, 1998 (*see* 63 FR 51404), detailing the agency's intent to issue new regulations for steam locomotive inspection and maintenance. In the NPRM, FRA solicited written comments from all interested parties and provided notice of its intention to conduct a public hearing on the

proposed rulemaking only if so requested. A total of 20 commenters responded to the NPRM, including the following:

Association of American Railroads (AAR) Association of Railway Museums, Inc. John C. Boykin Grand Canyon Railway Locomotive and Tower Preservation Fund, Ltd. Michigan State Trust Fund For Railway Preservation, Inc. Minnesota Transportation Museum, Inc. National Board of Boiler and Pressure Vessel Inspectors (NBBPVI) North Star Rail Ohio Central Railroad System San Diego Railroad Museum St. Louis Steam Train Association Tennessee Valley Railroad Union Pacific Railroad (UP) United States Department of Interior (DOI) Wisconsin Railway Preservation Trust

Some comments related to miscellaneous aspects of the new regulatory requirements. Other comments addressed specific paperwork requirements themselves rather than the burden hours and burden costs associated with those requirements. For example, regarding the movement of non-complying locomotives (§ 230.12), one railroad stated that this section should include a provision that the requirement that a steam locomotive be tagged as "non-complying" not apply when such moves are made in yard areas and restricted to a maximum speed of 10 mph. The same railroad suggested that this section include a requirement that the steam locomotive initials be written on the non-complying tag in addition to the locomotive number. In keeping with the steam locomotive task force's recommendation, FRA adopted the first suggested provision since there is no compelling reason for having different procedures for the movement of non-complying steam and non-steam locomotives. This change eliminated some paperwork. FRA decided not to require the steam locomotive initials be written on the tag.

Regarding the 31 service day inspection (§ 230.14) and 92 service day inspection (§ 230.15), comments were received on the requirements that locomotive owners and/or operators file a report of each steam locomotive's 31 service day and 92 service day inspections in the place where the steam locomotive is maintained and with the FRA Regional Administrator for that region. One commenter believed that filing the 31 service day and 92 service day inspection reports with the agency is unnecessary since the annual FRA Form 3 provides the agency with adequate notice that the steam locomotive is in service that year. This commenter suggested eliminating these requirements. After weighing the concerns of the commenters and the recommendations of the task force, FRA decided to leave these two sections unchanged in the current rule.

FRA determined that the requirement of timely filing of inspection reports is reasonable and fully justified by its need to have up-to-date proof that all steam locomotives currently in use are being inspected as required.

Regarding annual inspections (§ 230.16), a number of interested parties submitted comments on FRA notification and on filing inspection reports. The same railroad that favored elimination of filing the 31 and 92 serviced day reports advocated eliminating the requirement of filing annual reports. After careful consideration, the agency also decided to leave this section unchanged in the current rule. FRA decided that the inspection and filing requirements are entirely justified by the safety concerns implicated, especially in light of the reduced compliance "burden" placed on locomotive owners and/or operators under the current rule.

Regarding alteration and repair reports for steam locomotive boilers (§ 230.20), several comments were offered. One commenter remarked that locomotive owners and/or operators performing welded repairs on stayed areas should only be required to maintain records of those repairs. Another commenter contended that locomotive owners and/or operators should be required to maintain – but not file with FRA – records of standard repairs, such as welding or repairing staybolts. Another commenter stated that reports on steam locomotive boiler work should continue to be maintained and Form 19s filed when a locomotive boiler is altered. The same commenter asserted that when a locomotive boiler is repaired, the form used to report the repair should not require the calculation of stress levels. After reviewing these comments, FRA decided to keep this section of the current rule as it is, since the agency believes the present system of reporting and filing is efficient and not unduly burdensome to locomotive owners and/or operators.

Regarding welded repairs and alterations (§ 230.33), one commenter argued that steam locomotive owners and/or operators who perform welded repairs on stayed portions of the locomotive boiler should be required to maintain records of those reports, but not be required to file a Form 19 with the agency. Another commenter submitted a similar statement that urged FRA only require that such reports or Form 19s be kept by the steam locomotive owner and/or operator's chief mechanical officer or at the site where the work was performed. (This same commenter made the identical point concerning riveted repairs and alteration under § 230.34). Several commenters took exception to subsection (d), which provides that steam locomotive owners and/or operators must submit a written request for approval to FRA before installing flush patches on unstayed boiler portions. Here again, FRA determined that this section's reporting and filing requirements are justified. Considering the critical nature of such work and the importance that it be done properly, FRA felt that requiring owners and/or operators to obtain FRA approval before performing this type of work on a locomotive boiler and to file a report with FRA after completing the work is not unreasonable. Thus, this section remained unchanged. FRA also retained the reporting requirements of § 230.34 in the final rule because it deemed it essential that it have the right to review all proposed riveted alterations on unstaved boiler portions, since any such work, in changing the boiler's pressure retention capability, may

have a major impact on the locomotive's structural integrity. Regarding stenciling dates of testing and cleaning (§ 230.75), one commenter advanced the notion that the shop and/or station where the testing and cleaning was performed should be spelled out. Since FRA's intent was to set certain minimum requirements, FRA left this section intact. However, the agency decided to allow steam locomotive owners and/or operators to provide/stencil additional, more detailed information, provided the basic requirements of the current rule are met.

Finally, regarding main, side, and valve motion rods (§ 230.96), there were several comments. Two different commenters expressed disagreement with the requirement in subsection (b) that steam locomotive owners and/or operators submit a written request to FRA for approval prior to doing any welding of defective main rods, side rods, and valve gear components. Concerned that steam locomotive owners and/or operators would likely incur long delays waiting for agency approval during which the owners and/or operators would not be able to use their steam locomotives, one of these commenters urged instead that owners and/ or operators be permitted to perform welding on the rods (as per accepted national standards) and then submit detailed notification to FRA. Given the potentially disastrous consequences if an improperly repaired side and/or valve rod were to break while the steam locomotive was in service, FRA decided that it is critical that it have the opportunity to review and approve or deny requests to perform such repairs beforehand. Thus, this section remained unaltered in the current rule.

In addition to the written comments to the NPRM, FRA held a public hearing on February 4, 1999, since a number of interested parties requested the opportunity to present their views at such a forum. Individuals and groups were given the opportunity to comment. Seven organizations presented testimony at this hearing. Those testifying included representatives from the following organizations:

Austin and Texas Central Railroad; Diversified Rail Services Grand Canyon Railway; Ohio Central Railway System Tennessee Valley Railroad; Tourist Railway Association Inc. (TRAIN) Union Pacific Railroad.

Because of the number of substantive comments received during the notice and comment period and at the public hearing, the task force suggested and FRA agreed to meet to address the issues raised and to consider changes to the proposal for inclusion in the current rule. The meeting was held on March 11-12, 1999. Among the issues addressed at this meeting were the following: Implementation of the rule; Preemption of state oversight of steam locomotive operations; Waivers of requirements; Responsibility for compliance; Definitions of terms used; Movement of non-complying locomotives; 31 service-day inspection requirements; 92 service-day inspection requirements; Annual inspection requirements; 1472 service-day inspection requirements; Alteration and repair reports for steam locomotive boilers; Responsibility for general and safe working pressure; Maximum allowable stress on stays and braces; Tensile strength of shell plates; Higher shearing strength of rivets; Times and methods of inspection; Welded repairs and alterations; Hydrostatic testing of boilers; Broken staybolts; Times and methods of staybolt testing; The number and location of water glasses and gauge cocks; When to require boiler washing; Inspection, repair and/or replacement of arch tubes, water bar tubes, circulators, and thermic siphons; Steam locomotive speed indicators; Testing main reservoirs; Time of cleaning; Stenciling dates of testing and cleaning; Fire doors and mechanical stokers; Required illumination; Throttles; The draw gear between steam locomotive and tender; Main, side, and valve motion rods; The steam locomotive frame; Tender trucks; Feed water tanks; and Inspection requirements.

In collaboration with its task force, FRA carefully considered all the comments proffered in the notice and comment period and at the public hearing. The current rule included input from a wide array of individuals and groups. Among those who contributed as advisors were steam locomotive experts, equipment manufacturers representatives, steam railroad operators, labor groups representatives, public associations representatives, steam boiler inspection company representatives, the National Boiler Inspection Code Committee, Volpe National Transportation Systems Center (Volpe Center), State government representatives, and several representatives from the Federal Railroad Administration (FRA).

### 9. <u>Payments or gifts to respondents</u>.

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

### 10. <u>Assurance of confidentiality</u>.

No assurances of confidentiality were made by FRA.

Information collected is not of a private nature.

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

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

# 12. Estimate of burden hours for information collected.

Note: As mentioned in the summary above, the burden for this information collection has increased greatly from the last approved submission because that submission – and the previous submissions before that one – did not fully take into account the complex and time consuming nature of the required steam locomotive inspections under this Part. Instead, that submission – and previous submissions to that – only calculated the minimal burden associated with completing the required forms. The previous program specialist

relied on for past agency estimates did not have the depth of knowledge and understanding as the current specialist recently consulted whose wealth of experience and knowledge has led to his selection as the FRA Motive Power and Equipment (MP&E) branch chief.

There are roughly 82 owners/operators who run approximately 150 steam locomotives registered with FRA. Most of these steam locomotives operate on an intermittent or seasonal basis. FRA believes that the average steam locomotive is operated for approximately 90 days per calendar year and that approximately 80 percent of the 150 steam locomotives are in operation at any given time while the other 20 percent is being serviced.

# **Reporting Requirements**

### § 230.3 Implementation

A. <u>Interim Flue Removal Extensions</u>. FRA will continue to consider requests for flue removal extensions under the provisions of § 230.10 of the regulations in effect prior to January 18, 2000 (*See* 49 CFR parts 200-299, revised October 1, 1978) until January 18, 2002.

All requests have long been submitted and, in fact, this provision no longer applies. Consequently, there is no burden associated with this requirement.

B. <u>Petition For Special Consideration</u>. The locomotive owner or operator may petition FRA for special consideration of this part's implementation with respect to any locomotive that has either fully or partially satisfied the requirements of § 230.17 within the three (3) year period prior to September 25, 1998, provided the locomotive is in full compliance with § 230.17 by the time the petition is actually filed.

Petitions must be filed by January 18, 2001, and must be accompanied by all relevant documentation to be considered, including a FRA Form No. 4 that has been calculated in accordance § 230.17, and all records that demonstrate the number of days the locomotive has been in service. Petitions should be sent to FRA by some sort of registered mail to ensure a record of delivery.

Again, this is a provision that no longer applies. All petitions were submitted a long time ago. Consequently, there is no burden associated with this requirement.

C. <u>FRA Silence</u>. Anyone who does not receive a response within one year of the date they filed their petition, whether through administrative or postal error, must notify FRA that the response has not been received. The notification should be provided to FRA by some form of registered mail to ensure a record of delivery. Upon receipt of this notification, FRA will ensure that a response is either issued or re-issued, as soon as possible.

This provision too is no longer applicable. Consequently, there is no burden associated with this requirement.

### § 230.4 Penalties

Any person who knowingly and willfully falsifies a record or report required by this Part may be subject to criminal penalties under 49 U.S.C. 21311.

FRA believes that no records or reports required by this Part will be falsified. Consequently, there is no burden associated with this requirement.

### § 230.6 Waivers

A. A person subject to a requirement of this part may petition the Administrator of FRA for a waiver of compliance with such requirement. The filing of such a petition does not affect that person's responsibility for compliance with that requirement while the petition is being considered. Each petition for waiver under this section must be filed in the manner and contain the information required by part 211 of this chapter.

FRA estimates that it will receive approximately two (2) waivers annually under this requirement. It is estimated that it will take approximately one (1) hour for each respondent to prepare a waiver letter and forward it to FRA. Total annual burden for this requirement is two (2) hours.

Respondent Universe:	82 steam
	owners/operators
Burden time per response:	1 hour
Frequency of Response:	On occasion
Annual number of Responses:	2 waiver letters
Annual Burden:	

2 hours

# **<u>Calculation</u>**: 2 waivers letters x 1 hr. = 2 hours

B. All waivers of every form and type from any requirement of any order or regulation implementing the Locomotive Boiler Inspection Act, 36 Stat. 913, as amended, 49 U.S.C. 20702, applicable to one or more steam locomotives, shall lapse on January 18, 2000, unless a copy of the grant of waiver is filed for reassessment prior to that date with the Office of Safety, Federal Railroad Administration, 1200 New Jersey Ave., S.E.,

Washington, D.C. 20590. FRA will review the waiver and notify the applicant whether the waiver has been continued.

Since the effective date of the final rule has passed, railroads would now have to file for new waivers. The burden for this requirement is included under the requirement above.

The total burden for this information collection requirement is two (2) hours.

### §230.12 Movement of Non-Complying Steam Locomotives

<u>Conditions For Movement</u>. Prior to movement, the steam locomotive owner and/or operator must determine that it is safe to move the locomotive, determine the maximum speed and other restrictions necessary for safely conducting the movement, and notify in writing the engineer in charge of the defective steam locomotive and, if towed, the engineer in charge of the towing locomotive consist, as well as all other crew members in the cabs, of the presence of the non-complying steam locomotive and the maximum speed and other movement restrictions. The same written notification requirements apply if a steam locomotive develops a non-complying condition en route. In addition, a tag bearing the words "non-complying locomotive" must be securely attached to each defective steam locomotive and must contain the following information: (1) The steam locomotive number; (2) The name of the inspecting entity; (3) The inspection location and date; (4) The nature of the defect; (5) Movement restrictions, if any; (6) The destination; and (7) The signature of the person making the determinations required by this paragraph (b).

FRA estimates that approximately five (5) locomotives will be found to have noncomplying conditions and will need to be tagged. Both sides of the steam locomotive will need to be tagged, so a total of 10 tags will be completed. It is estimated that it will take approximately six (6) minutes for railroad workers to complete and attach each tag. Total annual burden for this requirement is one (1) hour.

Respondent Universe:	82 steam
	owners/operators
Burden time per response:	6 minutes
Frequency of Response:	On occasion
Annual number of Responses:	10 tags
Annual Burden:	1 hour

**Calculation:** 10 tags x 6 min. = 1 hour

### § 230.14 Form 1 - 31 Service Day Inspection

A. An individual competent to conduct the inspection must perform the 31 service day inspection after the steam locomotive has accrued 31 service days. This inspection must

consist of all 31 service day inspection items and all daily inspection items. (These requirements are listed in Appendix A and are a convenient guide to ensure locomotives are safe and suitable for service.) Days in service must be counted, recorded, and readily available for inspection when requested by an FRA inspector. Not less frequently than every 31 service day inspection, boilers must be thoroughly washed (as stipulated in § 230.60) and those boilers equipped with fusible plugs must have them removed and cleaned of scale each time the boiler is washed (as stipulated in § 230.59). These two occurrences must be noted – either on FRA Form No. 1 or Form No. 3.

Within 10 days of conducting the 31 service day inspection, the steam locomotive owner and/or operator must file, for each steam locomotive inspected, a report of inspection (FRA Form No. 1), in the place where the steam locomotive is maintained and with the FRA Regional Administrator for that region. When the report of annual inspection (FRA Form No. 3) is filed, the FRA Form No. 1 does not have to be filed until the next 31 service day inspection.

Since 80 percent of the current fleet of 150 steam locomotives is operational at any given time while the rest are being serviced, FRA estimates that approximately 120 inspection reports (FRA Form No. 1s) will be completed and filed annually due to this requirement. It is estimated that it takes approximately 14 hours to complete the required inspection and additional 20 minutes to record the data on the form, make a copy, and mail the form to FRA. Total annual burden for this requirement is 1,720 hours.

Respondent Universe:	82 owners/operators
Burden time per response:	860 minutes (14 hrs. and 20
	min.)
Frequency of Response:	On occasion
Annual number of Responses:	120 reports
Annual Burden:	1,720 hours

**Calculation:** 120 reports x 860 min. = 1,720 hours

B. <u>FRA Notification</u>. FRA Regional Administrators or their delegate(s) may require a steam locomotive owner or operator to provide FRA with timely notification before performing a 31 day service inspection. If the Regional Administrator or his/her delegate indicates a desire to be present for the 31 day service day inspection, the steam locomotive owner and/or operator must provide them a scheduled date and location for inspection. Once scheduled, the inspection must be performed at the time and place specified, unless the Regional Administrator and the steam locomotive owner and/or operator mutually agree to reschedule. If the Regional Administrator requests the inspection be performed on another date but the steam locomotive and/or operator and the Regional Administrator are unable to agree on a date for rescheduling, the inspection may be performed as scheduled.

Based on the information provided above, FRA estimates that approximately 120

notifications will be completed and sent as a result of this requirement. It is estimated that it will take the steam locomotive owner/operator approximately five (5) minutes to compose the response to the FRA notification. Total annual burden for this requirement is 10 hours.

Respondent Universe:82 owners/operatorsBurden time per response:5 minutesFrequency of Response:On occasionAnnual number of Responses:120 notificationsAnnual Burden:10 hoursCalculation:120 notifications x 5 min. = 10 hours

Total annual burden for this requirement is 1,730 hours (1,720 hours + 10 hours).

#### § 230.15 Form 1 - 92 Service Day Inspection

An individual competent to conduct the inspection must perform the 92 service day inspection after the steam locomotive has accrued 92 "service days." This inspection must include all daily, all 31 service day, and all 92 service day inspection items. (These requirements are listed in Appendix A and are a practical guide to ensure locomotives are safe and suitable for service.) Days in service must be counted, recorded, and readily available for inspection when requested by an FRA inspector. Not less frequently than every 31 service day inspection, boilers must be thoroughly washed (as stipulated in § 230.60) and those boilers equipped with fusible plugs must have them removed and cleaned of scale each time the boiler is washed (as stipulated in § 230.59). These two occurrences must be noted – either on FRA Form No. 1 or Form No. 3.

Within 10 days of conducting the 92 service day inspection, the steam locomotive owner and/or operator must file, for each steam locomotive inspected, a report of inspection (FRA Form No. 1), in the place the locomotive is maintained and with the FRA Regional Administrator for that region. When the report of annual inspection (FRA Form No. 3) is filed, the FRA Form No. 1 does not have to be filed until the next 92 service day inspection.

As noted above, approximately 80 percent of the current fleet of 150 steam locomotives is operational at any given time while the rest are being serviced. Consequently, FRA estimates that approximately 120 inspection reports (FRA Form No. 1s) will be completed due to the above requirement. Since this inspection is more complicated or involved than the 31 service day inspection, it is estimated that it takes approximately 16 hours to complete the required inspection and another 20 minutes to record the data on the form, make a copy, and mail the form to FRA. Total annual burden for this requirement is 1,960 hours.

Respondent Universe:

82 owners/operators

Burden time per response:	16 hours + 20 minutes
Frequency of Response:	On occasion
Annual number of Responses:	120 reports
Annual Burden:	1,960 hours

**<u>Calculation</u>**: 120 reports x 980 min. (16 hrs. and 20 min.) = 1,960 hours

### § 230.16 Form No. 3 - Annual Inspection

A. An individual competent to conduct the inspection must perform the annual inspection after 368 calendar days have elapsed from the time of the previous annual inspection. This inspection must include all daily, all 31 service day, all 92 service day, and all annual inspection items. (These requirements are listed in Appendix B and serve as a practical guide to ensure locomotives are safe and suitable for service.) Not less frequently than every 31 service day inspection, boilers must be thoroughly washed (as stipulated in § 230.60) and those boilers equipped with fusible plugs must have them removed and cleaned of scale each time the boiler is washed (as stipulated in § 230.59). These two occurrences must be noted - either on FRA Form No. 1 or Form No. 3. FRA Form No. 3 is used to report all other required information.

Within 10 days of completing the annual inspection, the steam locomotive owner and/or operator must file, for each steam locomotive inspected, a report of inspection (FRA Form No. 3), in the place where the steam locomotive is maintained and with the FRA Regional Administrator for that region. (*See* Appendix A of this part)

As noted above, approximately 80 percent of the current fleet of 150 steam locomotives is operational at any given time while the rest are being serviced. Consequently, FRA estimates that approximately 120 annual inspection reports (FRA Form No. 3s) will be completed or filed due to this requirement. Since the annual inspection is more complicated or involved than both the 31 service and 92 service day inspections, it is estimated that it takes approximately 24 hours to complete the required inspection and approximately 30 minutes to record the data on the form, make a copy, and mail the form to FRA. Total annual burden for this requirement is 50 hours.

Respondent Universe:	82 owners/operators
Burden time per response:	24 hours + 30 minutes
Frequency of Response:	Annually
Annual number of Responses:	120 reports
Annual Burden:	2,940 hours

**Calculation:** 120 reports x 24.5 hrs. = 2,940 hours

B. <u>FRA Notification</u>. Regional Administrators must be provided written notice at least one month prior to an annual inspection and must be afforded an opportunity to be present. If the Regional Administrator or his/her delegate indicates a desire to be present, the steam locomotive owner and/or operator will provide a scheduled date and location for the inspection. Once scheduled, the inspection must be performed at the time and place specified, unless the Regional Administrator and the steam locomotive owner and/or operator mutually agree to reschedule. If the Regional Administrator requests the inspection be performed on another date but the steam locomotive and/or operator and the Regional Administrator are unable to agree on a date for rescheduling, the inspection must be performed as scheduled.

FRA estimates that approximately 120 notifications will be sent as a result of this requirement. It is estimated that it will take the steam locomotive owner/operator approximately five (5) minutes to compose a response to this notification letter. Total annual burden for this requirement is 10) hours.

Respondent Universe:	82 owners/operators
Burden time per response:	5 minutes
Frequency of Response:	On occasion
Annual number of Responses:	120 notifications
Annual Burden:	10 hours

**<u>Calculation</u>**: 120 notifications x 5 min. = 10 hours

Total annual burden for this requirement is 2,950 hours (2,940 hours + 10 hours).

### § 230.17 Form 4 - 1472 Service Day Inspection

Before any steam locomotive is initially put in service or brought out of retirement, and after 1472 service days or 15 years, whichever is earlier, an individual competent to conduct the inspection must inspect the entire boiler. In the case of a new locomotive or a locomotive being brought out of retirement, the initial 15 year period shall begin on the day that the locomotive is placed in service or 365 calendar days after the first flue tube is installed in the locomotive, whichever comes first. This 1472 service day inspection must include all annual, and 5th annual, inspection requirements, as well as any items required by the steam locomotive owner and/or operator or the FRA inspector. At this time, the locomotive owner and/or operator must complete, update, and verify the locomotive specification card (FRA Form No. 4) to reflect the condition of the boiler at the time of this inspection.

Within 30 days of completing the 1472 service day inspection, the steam locomotive owner and/or operator must, for each steam locomotive inspected, file in the place where steam locomotive is maintained and with the FRA Regional Administrator for that region

a report of inspection (FRA Form No. 3), and a completed FRA Form No. 4.

FRA estimates that approximately 12 forms (FRA No. 4s) or specification cards will be filled-in due to this requirement. Since the 1472 service day inspection is more complicated or involved than the 31 service day inspection, 92 service day inspection, or annual inspection, it is estimated that it will take the steam locomotive owner/operator approximately 500 hours to complete the required inspection and another 30 minutes to complete each form, make a copy, and mail the form to FRA. Total annual burden for this requirement is five (5) hours. (*Note: The burden for FRA Form No. 3 is already included above under § 230.16.*)

Respondent Universe:	82 owners/operators
Burden time per response:	500.5 hours
Frequency of Response:	On occasion
Annual number of Responses:	12 forms
Annual Burden:	6,006 hours

**<u>Calculation</u>**: 12 forms x 500.5 hrs. = 6,006 hours

#### § 230.20 Form No. 19 - Alteration and Repair Reports For Steam Locomotive Boilers

When an alteration is made to a steam locomotive boiler, or whenever welded/riveted repairs are made on unstayed or on stayed portions of a steam locomotive boiler, the steam locomotive owner and/or operator must file an alteration report (FRA Form No. 19), detailing the changes to the locomotive with the FRA Regional Administrator (within 30 days from the date the work was completed in the first two situations). This form must be attached to and maintained with Form No. 4 until such time as a new Form No. 4 reflecting the alteration is submitted to the (FRA) Regional Administrator. Alteration reports (FRA Form No. 19) must be filed and maintained for the life of the boiler.

FRA estimates that an average of approximately five (5) alteration reports (Form 19s) will be submitted by steam owners/operators due to this requirement. It is estimated that it takes approximately three (3) hours for the steam locomotive owner/operator to fill-in this form, and mail it to FRA. Total annual burden for this requirement is 15 hours.

Respondent Universe:	82 owners/operators
Burden time per response:	3 hours
	Frequency of Response:
	On occasion
Annual number of Responses:	5 reports
Annual Burden:	15 hours

**<u>Calculation</u>**: 5 reports x 3 hrs. = 15 hours

# § 230.21 Steam Locomotive Number Change

When a steam locomotive number is changed, the steam locomotive owner and/or operator must reflect the change in the upper right-hand corner of all documentation related to the steam locomotive by showing the old and new numbers.

FRA estimates that approximately one (1) steam locomotive will have its number changed (affecting one (1) document) under the above requirement. It is estimated that it takes approximately two (2) minutes for the steam locomotive owner/operator to change the necessary documents. Total annual burden for this requirement is .033 hour.

Respondent Universe:	82 owners/operators
Burden time per response:	2 minutes
Frequency of Response:	On occasion
Annual number of Responses:	1 document
Annual Burden:	.033 hour

**<u>Calculation</u>**: 1 documents x 2 minutes = .033 hour

# § 230.22 Accident Reports

In the case of an accident due to failure, from any cause, of a steam locomotive boiler or any part or appurtenance thereof, resulting in serious injury or death to one or more persons, the railroad on whose line the accident occurred must immediately make a telephone report of the accident by calling the National Response Center (toll free) at Area Code 800-424-0201. The report shall state the nature of the accident, the number of persons killed or seriously injured, the place at which it occurred, and the location where the steam locomotive may be inspected. Confirmation of this report must be immediately mailed to the Associate Administrator for Safety, Federal Railroad Administration, Washington, D.C. 20590, and contain a detailed report of the accident, including, to the extent known, the causes and a complete list of the casualties. (*Note*: There has been one (1) steam locomotive accident reported in the past 10 years.)

The burden hours associated with this requirement are included in FRA's submission to OMB titled "Accident/Incident Reporting and Recordkeeping Requirements" (OMB No. 2130-0500). Consequently, there is no additional burden associated with this requirement.

# § 230.33 Welded Repairs and Alterations

A. <u>Unstayed portions of the boiler containing alloy steel or carbon steel with a carbon</u> <u>content over 0.25 percent</u>. Prior to welding on unstayed portions of the boiler, the steam locomotive owner and/or operator must submit a written request for approval to the FRA Regional Administrator. If the approval is granted, the steam locomotive owner and/or operator must perform any welding to unstayed portions of the boiler in accordance with an accepted national standard for boiler repairs. The steam locomotive owner and/or operator is also required to satisfy reporting requirements in § 230.20 at this time and also when performing any welding to unstayed portions of the boiler not exceeding 0 .25 carbon content. Moreover, when welding is done to stayed portions of the boiler or unstayed portions of the boiler with carbon steel content less than .25 percent carbon, the steam locomotive owner and/or operator is required to satisfy reporting requirements in § 230.20 at this time.

FRA estimates that approximately five (5) letters will be submitted by steam owners/operators due to this requirement. It is estimated that it will take approximately two (2) hours for the steam locomotive owner/operator to compose this letter. Total annual burden for this requirement is 10 hours.

Respondent Universe:	82 owners/operators
Burden time per response:	2 hours
Frequency of Response:	On occasion
Annual number of Responses:	5 letters
Annual Burden:	10 hours

**<u>Calculation</u>**: 5 letters x 2 hrs. = 10 hours

B. <u>Wastage</u>. The steam locomotive owner and/or operator must submit a written request for approval to the FRA Regional Administrator before performing weld build up on wasted areas of unstayed surfaces of the boiler that exceed a total of 100 square inches or the smaller of 25 percent of minimum required wall thickness or ½ inch (or for the installation of flush patches of any size on unstayed portions of the boiler). Wasted sheets shall not be repaired by weld build up if the wasted sheet has been reduced to less than 60 percent of the minimum required thickness as required by this part.

FRA estimates that approximately three (3) letters will be submitted by steam owners/operators due to this requirement. It is estimated that it will take approximately two (2) hours for the steam locomotive owner/operator to compose each letter. Total annual burden for this requirement is six (6) hours.

Respondent Universe:	82 owners/operators
Burden time per response:	2 hours
Frequency of Response:	On occasion
Annual number of Responses:	3 letters
Annual Burden:	6 hours

**<u>Calculation</u>**: 3 letters x 2 hrs. = 6 hours

Total annual burden for this requirement is 16hours (10 + 6).

### § 230.34 Riveted Repairs and Alterations

<u>Alterations to unstayed portions of the boiler</u>. Prior to making riveted alterations on unstayed portions of the boiler, the steam locomotive owner and/or operator must submit a written request for approval to the FRA Regional Administrator. The steam locomotive owner and/or operator must perform riveted repairs, or alterations to stayed or unstayed portions of the boiler in accordance with established railroad practices or an accepted national standard for boiler repairs. In each situation, the steam locomotive owner and/or operator is required to satisfy reporting requirements in § 230.20 at this time.

FRA estimates that approximately two (2) requests will be submitted by steam owners/operators due to this requirement. It is estimated that it will take approximately two (2) hours for the steam locomotive owner/operator to complete this request. Total annual burden for this requirement is four (4) hours.

	Respondent Universe: 82 owners/operators
Burden time per response:	2 hours
Frequency of Response:	On occasion
Annual number of Responses:	2 written requests
Annual Burden:	4 hours
Frequency of Response: Annual number of Responses:	82 owners/operator 2 hours On occasion 2 written requests

**<u>Calculation</u>**: 2 written requests x 2 hrs. = 4 hours

### Setting of Safety Relief Valves § 230.49

<u>Labeling of Lowest Set Pressure</u>. The set pressure of the lowest safety relief valve must be indicated on a tag or label attached to the steam gauge so that it may be clearly read while observing the steam gauge.

FRA estimates that approximately five (5) locomotives will require a tag attached to the steam gauge with the set pressure of the lowest safety valve displayed. Each side of the locomotive will need to be marked with a tag. Consequently, 10 tags will be completed. It is estimated that it will take approximately 60 minutes to mark each tag. Total annual burden for this requirement is 10 hours.

Respondent Universe:	150 steam
	locomotives
Burden time per response:	60 minutes
Frequency of Response:	On occasion
Annual number of Responses:	10 tags
Annual Burden:	10 hours

### **<u>Calculation</u>**: 10 tags x 60 min. = 10 hours

#### § 230.59 Fusible Plugs

If boilers are equipped with fusible plugs, the plugs must be removed and cleaned of scale each time the boiler is washed but not less frequently than during every 31 service day inspection. Their removal must be noted on the FRA Form No. 1 or FRA Form No. 3.

The burden for this requirement is included above in the burden listed under § 230.15 and § 230.16. Consequently, there is no additional burden associated with this requirement.

#### § 230.60 Washing Boilers - Time of Washing

<u>Frequency of Washing</u>. All boilers shall thoroughly be washed as often as the water conditions require, but not less frequently than at each 31 service day inspection. The date of the boiler wash must be noted on the FRA Form No. 1 or FRA Form No. 3.

The burden for this requirement is included above in the burden listed under § 230.15 and § 230.16. Consequently, there is no additional burden associated with this requirement.

#### § 230.96 Main, Side, and Valve Motion Rods

<u>Repairs</u>. Repairs, and welding of main, side or valve motion rods must be made in accordance with an accepted national standard. The steam locomotive owner and/or operator must submit a written request for approval to the FRA Regional Administrator prior to welding defective main rods, side rods, and valve gear components.

FRA estimates that approximately one (1) repair letter will be submitted due to this requirement. It is estimated that it will take approximately eight (8) hours to compose this letter. Total annual burden for this requirement is eight (8) hours.

Respondent Universe:	82 owner/operators	
Burden time per response:	8 hours	
Frequency of Response:	On occasion	
Annual number of Responses:	1 letter	
Annual Burden	8 hours	

**Calculation:** 1 letter x 8 hrs. = 8 hours

### **RECORDKEEPING REQUIREMENTS**

### § 230.13 Form No. 2 (Daily) - Inspection Reports

The daily inspection must be conducted to comply with all sections of this part, and a daily inspection report filed, by an individual competent to conduct the inspection. This individual must inspect each steam locomotive and its tender each day that they are offered for use to determine that they are safe and suitable for service. The results of the daily inspection must be entered on FRA Form No. 2 which must contain, at a minimum, the name of the railroad, the initials and number of the steam locomotive, the place, date and time of the inspection, the signature of the employee making the inspection, a description of the non-complying conditions disclosed by the inspection, conditions found in non-compliance during the day and repaired and the signature of the person who repaired the non-conforming conditions. This report must be filed even if no non-complying conditions were repaired before the steam locomotive is operated. This report must be filed and retained for at least 92 days at the location designated by the steam locomotive owner and/or operator.

FRA estimates that approximately 3,650 daily inspection reports (FRA Form No. 2s) will be filed annually due to this requirement. It is estimated that it takes the owner/operator approximately 60 minutes to complete this form. Total annual burden for this requirement is 3,650 hours.

Respondent Universe:	82 owners/operators		
Burden time per response:	60minutes		
Frequency of Response:	Annually		
Annual number of Responses:	3,650 reports		
Annual Burden	3,650 hours		

### **Calculation:** 3,650 reports x 60 min. = 3,650 hours

### § 230.17 Form 3 - 1472 Service Day Inspection

<u>Filing Inspection Reports</u>. Within 30 days of completing the 1472 day service day inspection, the steam locomotive owner and/or operator, must, for each locomotive inspected, file in the place where the steam locomotive is maintained and with the FRA Regional Administrator for that region a report of inspection (FRA Form No. 3) and a completed FRA Form No. 4.

FRA estimates that approximately 12 reports (FRA Form No. 3s) will be filed due to this requirement. It is estimated that it will take the steam locomotive owner/operator approximately 15 minutes to file in the place where the steam locomotive is maintained the required forms and to send the two forms to the appropriate FRA Regional Administrator. Total annual burden for this requirement is three (3) hours.

Respondent Universe:82 owners/operatorsBurden time per response:15 minutesFrequency of Response:On occasionAnnual number of Responses:12 reportsAnnual Burden:3 hours

**<u>Calculation</u>**: 12 reports x 15 min. = 3 hours

### § 230.18 Form No. 5 - Service Day Report

<u>Service Day Record</u>. For every steam locomotive currently in service, the steam locomotive owner and/or operator must have available, and be able to show to an FRA inspector upon request, a current copy of the service day record that contains the number of service days the steam locomotive has accrued since the last 31, 92, Annual and 1472 service day inspections.

By the 31<sup>st</sup> of every January, every steam locomotive owner and/or operator must file a service day report, FRA Form No. 5, with the Regional Administrator accounting for the days the steam locomotive was in service from January 1 through December 31st of the preceding year. If the steam locomotive was in service zero (0) days during that period, a report must still be filed to prevent the steam locomotive from being considered retired by FRA.

FRA estimates that approximately 150 reports (FRA Form No. 5s) will be filed annually by steam locomotive owners/operators under the above requirement. It is estimated that it takes approximately 15 minutes for the steam locomotive owner/operator to fulfill this requirement. Total annual burden for this requirement is 38 hours.

Respondent Universe: 82 ov			
	operators		
Burden time per response:	15 minutes		
Frequency of Response: Annually			
Annual number of Responses:	150 reports		
Annual Burden:	38 hours		

**<u>Calculation</u>**: 150 reports x 15 min. = 38 hours

### § 230.19 Posting of Copy (FRA Form No. 1 and FRA Form No. 3)

(a.) The steam locomotive owner and/or operator must place a copy of 31, and 92 day service day inspection report (FRA Form No. 1), properly filled out, under transparent cover in a conspicuous place in the cab of the steam locomotive before the inspected boiler is put into service. This FRA Form No. 1 will not be required for the first 31 service days following an annual inspection and the posting of an FRA Form No. 3.

(b.) In addition to the FRA Form No. 1, the steam locomotive owner and/or operator must also maintain in the cab a current copy of FRA Form 3 in the manner described in paragraph (a) of this section.

FRA estimates that approximately 300 forms will be placed in the cab by steam locomotive owners/operators due to the above requirements. It is estimated that it takes approximately five (5) minutes for the steam locomotive owner/operator to do this. Total annual burden for this requirement is 25 hours.

Respondent Universe:	82 owners/operators		
Burden time per response:	5 minutes		
Frequency of Response:	On occasion		
Annual number of Responses:	300 forms		
Annual Burden:	25 hours		

**<u>Calculation</u>**: 300 forms x 5 min. = 25 hours

### <u>§ 230.41 Flexible Staybolts with Caps</u>

The removal of flexible staybolt caps and other tests must be reported on FRA Form No. 3. Flexible staybolts with caps must have their caps removed during every 5th annual inspection for the purpose of inspecting the bolts for breakage, except as provided paragraph (b) of this section.

FRA estimates that approximately 20 entries will be made on this form due to this requirement. It is extremely complicated to remove the flexible staybolt caps and perform the necessary tests to complete the entry on Form No. 3. Thus, it is estimated that it will take approximately 120 hours per locomotive to accomplish. Total annual burden for this requirement is 2,400 hours.

Respondent Universe: Burden time per response: Frequency of Response: Annual number of Responses: Annual Burden:	82 owners/operate 120 hours On occasion 20 entries 2,400 hours	ors
<u>Calculation</u> :	x 1 hrs 2,4	tries 120 5. = 400 urs

#### § 230.46 Badge Plates

A metal badge plate showing the allowed steam pressure must be attached to the boiler backhead in the cab. (This is performed at the time the boiler is built by the manufacturer.) If the boiler backhead is lagged, the lagging and jacket must be cut away so that the plate can be seen.

Currently, all locomotives are so marked. However, if three (3) boilers are built a year or brought into this country, it would require approximately two (2) hours to perform this task because it involves metal and has to be done with hand stamps. Total annual burden for this requirement is six (6) hours.

Respondent Universe:	82 owners/operators		
Burden time per response:	2 hours		
Frequency of Response:	Annually		
Annual number of Responses:	3 reports		
Annual Burden:	6 hours		

**Calculation:** 3 reports x 2 hrs. = 6 hours

### § 230.47 Boiler Number

The builder's number of the boiler, if known, must be stamped on the steam dome or manhole flange. (This is performed at the time the boiler is built by the manufacturer.) If the builder's number cannot be obtained, an assigned number, which shall be used in making out specification cards, must be stamped on the steam dome or manhole flange. Numbers which are stamped after January 10, 1912, must be located on the front side of the steam dome or manhole flange at the upper edge of the vertical surface, oriented in a horizontal manner, and have figures at least 3/8 inch high. The number must be preceded by the name of the manufacturer if the original number is known or the name of the steam locomotive owner if a new number is assigned.

Currently, all locomotives are so marked. However, if one (1) boiler is built a year, it would require approximately 60 minutes to perform this task. Total annual burden for this requirement is one (1) hour.

Respondent Universe:	1
Burden time per response:	60 minu
Frequency of Response:	On occa
Annual number of Responses:	1 stamping
Annual Burden:	

82 owners/operators ) minutes n occasion g 1 hour

### **<u>Calculation</u>**: 1 stamping x 60 min. = 1 hour

#### § 230.75 Stenciling Dates of Tests and Cleaning

The date of testing and cleaning and the initials of the shop or station at which the work is done must be legibly stenciled in a conspicuous place on the tested parts or placed on a card displayed under a transparent cover in the cab of the steam locomotive.

All railroads use the same system and only record this information on a card displayed under the glass in the cab of the locomotive. FRA estimates that approximately 50 air brakes locomotives will be tested annually under the above requirement. Because it is not an instant process, it is estimated that it will take approximately 30 minutes to complete the stenciling. Total annual burden for this requirement is 25 hours.

Respondent Universe:	82 owners/operators		
Burden time per response:	30 minutes		
Frequency of Response:	Annually		
Annual number of Responses:	50 tests		
Annual Burden:	25 hours		

**<u>Calculation</u>**: 50 tests x 30 min. = 25 hours

§ 230.98 Driving, Trailing, and Engine Truck Axles - Journal Diameter Stamped

For steam locomotives with plain bearings, the original/new journal diameter must be stamped on one end of the axle no later than January 18, 2005.

Currently, all locomotives are so marked. However, if a steam locomotive were to have a journal replaced once a year, FRA estimates that it would take approximately 15 minutes to perform this task. Total annual burden for this requirement is .25 hour.

Respondent Universe:	82 owners/operators	
Burden time per response:	15 minutes	
Frequency of Response:	Annually	
Annual number of Responses:	1 stamp	
Annual Burden:	.25 hour	

**<u>Calculation</u>**: 1 stamp x .25 hr. = .25 hour

§ 230.116 Oil Tanks

The oil tanks on oil burning steam locomotives must be maintained free from leaks. The oil supply pipe (on tanks on oil burning steam locomotives) must be equipped with a

safety cut-off device that: (1) Is located adjacent to the fuel supply tank or in another safe location, (2) Closes automatically when tripped and that can be reset without hazard, and (3) Can be hand operated from clearly marked locations, one inside the cab and one accessible from the ground on each exterior side of the steam locomotive.

FRA estimates that approximately 10 oil supply pipes on tanks will be affected and that a total of approximately 30 stencils will be placed on the oil supply pipe on tanks on oil burning steam locomotives. These stencils are painted black. It is estimated that it will take approximately 30 minutes to complete each of the three (3) stencils required for every locomotive (again totaling 30 stencils). Total annual burden for this requirement is one (1) hour.

Respondent Universe:

	02
	owner/operators
Burden time per response:	30 minutes
Frequency of Response:	On occasion
Annual number of Responses:	30 stencils
Annual Burden:	15 hours

**<u>Calculation</u>**: 30 stencils x 30 min. = 15 hours

Total annual burden for this entire information collection is 18,865 hours.

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

#### **COST TO RESPONDENTS**

The additional costs to respondents are listed below.

They are as follows:

\$ 300.00 Printing of Forms
350.00 Postage
<u>650.00</u> Filing Fee for flue inspections
\$1,300.00

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

#### **COST TO FEDERAL GOVERNMENT**

There is very little cost to the Federal Government associated with the recordkeeping requirements. These records are reviewed on a somewhat routine basis in connection

with regular agency enforcement activity that monitors steam locomotive owners and/or operators for compliance with inspection and testing requirements.

Approximately 200 burden hours would be expended yearly to review the special petitions and other reports forwarded to FRA under the requirements of this rule. Based on a \$100 per hour cost (includes 75 percent for overhead), the total annual cost to the Federal Government is \$20,000 (200 hours x \$100 = \$20,000).

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

The burden has <u>increased</u> by **18,852 hours** from the last approved submission. The increase in burden is solely due to **adjustments**. There are <u>no</u> **program changes**.

The table below gives an itemized breakdown of all adjustments:

# TABLE FOR ADJUSTMENTS

Part 230 Sec./	Responses &	Responses &	Burden	Burden	Difference
Form Number	Avg. Time	Avg. Time	Hours	Hours (This	(plus/minus)
	(Previous	(This	(Previous	Submission)	
	Submission)	Submission)	Submission)		
230.14 – 31 Service	100 reports	120 reports	33 hours	1,720 hours	+ 1,687 hours
Day Inspection –	20 minutes	860 minutes			+ 20 responses
Form No. 1					
- FRA Notifications	2 notifications	120 notifications	.17 hour	10 hours	+ 10 hours
	5 minutes	5 minutes			+ 118 resp.
230.15 – 92 Service	100 reports	120 reports	33 hours	1,960 hours	+ 1,927 hours
Day Inspection –	20 minutes	980 minutes			+ 20 responses
Form No. 1/No. 3					
230.16 – Annual	100 reports	120 reports	50 hours	2,940 hours	+ 2,890 hours
Inspection – Form	30 minutes	24.5 hours			+ 20 responses
No. 3					
FRA Notification	100 notices	120 notices	8 hours	10 hours	+ 2 hours
	5 minutes	5 minutes			+ 20 responses
230.17 - 1472	10 forms	12 forms	5 hours	6,006 hours	+ 6,001 hours

Service Day	30 minutes	500.5 hours			+ 2 responses
Inspection – Form No. 4					
230.20 – Form No. 19	5 reports 1 hour	5 reports 3 hours	5 hours	15 hours	+ 10 hours 0 responses
230.33 – Welded Repairs & Alterations – Letter to FRA	5 letters 10 minutes	5 letters 2 hours	1 hour	10 hours	+ 9 hours 0 responses
Wastage – Letters	5 letters 10minutes	3 letters 2 hours	1 hour	6 hours	+ 5 hours 2 responses
230.34 – Riveted Repairs & Alterations – Written Requests	10 requests 5 minutes	1 hour	2 requests 2 hours	4 hours	+ 3 hours 8 responses
230.49 – Setting of Safety Valve – Labeling of Lowest Set Pressure – Tags	16 tags 2 minutes	10 tags 60 minutes	1 hour	10 hours	+ 9 hours 6 responses
230.96 – Main, Side, and Valve Motion Rods – Written request to FRA for welding/repair of rods <b>RECORDS</b>	1 letter 10 minutes	1 letter 8 hours	.17 hour	8 hours	+ 8 hours 0 responses
230.13 – Form No. 2 – Daily Inspection Reports	3,650 reports 2 minutes	3,650 reports 60 minutes	122 hours	3,650 hours	+ 3,528 hours 0 responses
230.17 – Form No. 3 – 1472 Service Day Inspection	10 reports 15 minutes	12 reports 15 minutes	3 hours	3 hours	0 hours + 2 responses
230.19 – Posting of Copy – Form No. 1 and Form No. 3	300 forms 1 minutes	300 forms 5 minutes	5 hours	25 hours	+ 20 hours 0 responses
230.41 – Removal of flexible staybolt caps – FRA Form No. 3	10 entries 1 minute	20 entries 120 hours	.17 hour	2,400 hours	+ 2,400 hours + 10 responses
230.46 – Badge Plates – Reports	3 reports 30 minutes	3 reports 2 hours	2 hours	6 hours	+ 4 hours 0 responses
230.47 Boiler Number – Stamping	1 stamping 15 minutes	1 stamping 60 minutes	.25 hour	1 hour	+ 1 hour 0 responses
230.75 – Stenciling Dates of Tests & Cleaning	50 tests 1 minute	50 tests 30 minutes	1 hour	25 hours	+ 24 hours 0 responses
230.116 – Oil Tanks Clear Markings	30 signs 1 minute	30 stencils 30 minutes	1 hour	15 hours	+ 14 hours 0 responses

Adjustments above <u>increased</u> the burden by *18,852 hours*, and increased the number of responses by *196*. [\*\*\*\* Please note that there was a <u>math mistake</u> in the previously approved submission and that the correct number of responses was **4,672** and not **4,689** as listed in the OMB inventory.]

The current burden for this collection in the OMB inventory shows a total burden of 314 hours, while the present submission exhibits a total of 18,865 hours. Hence, there is an <u>increase</u> in burden of *18,851 hours* from the previous submission.

Also, the cost to respondents has increased by \$75 (from \$1,225 to \$1,300). This increase is an adjustment reflecting increased postage costs. [*Note: Although the previous submission showed a cost to respondents of* \$1,225, *ROCIS incorrectly listed the cost as* \$1,000. Consequently, ROCIS shows an increase in cost to respondents of \$300 instead of the correct increase in cost of \$75.]

### 16. <u>Publication of results of data collection</u>.

There are no plans for publication of this submission. Primarily, the information is used by specialists of the Office of Safety, as well as field personnel to enforce the regulation.

### 17. <u>Approval for not displaying the expiration date for OMB approval</u>.

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

### 18. <u>Exception to certification statement</u>.

No exceptions are taken at this time.

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

This information collection supports DOT top strategic goal, namely transportation safety because it seeks to reduce the number and severity of railroad accidents/incidents and the injuries and death which normally accompany them, as well to reduce any resulting property damage, by mandating requirements for the inspection and maintenance of steam locomotives, and their safe operation. Specifically, railroads and other steam locomotive owners/operators are required to keep steam locomotives "safe and suitable for service" by conducting required inspections and maintenance. Further, steam locomotive owners and/or operators are required to provide a record for each day a steam locomotive is placed in service and to provide a record that the required steam locomotive inspections have been completed. Additionally, there are requirements for individuals making repairs to steam locomotives. These requirements are designed to

ensure that any repair work made to steam locomotives, steam locomotive boilers, and their appurtenances is done properly. These requirements are calculated to eliminate boiler explosions and other potential problems that can cause sever injury or death. Thus, the information collection requirements of this rule serve to enhance and promote the safety operation of tourist and historic railroads by reducing/eliminating safety hazards that are unique to steam operated locomotives.

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