

**Supporting Statement  
Collection of Voluntary Lessons Learned  
From External Sources  
OMB # 2120-0748**

**A. Justification**

**1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating and authorizing the collection of information.**

The FAA/AST collects lessons learned from members of the commercial space industry in order to carry out the safety responsibilities in 49 USC Chapter 701 Section 70103 (c). These responsibilities include “encourage, facilitate, and promote the continuous improvement of the safety of launch vehicles designed to carry humans.”

The FAA/AST collects and shares lessons learned throughout the commercial space and amateur rocket communities to ensure the continued safety and successful outcome of launch activities. This voluntary collection of lessons learned facilitates the sharing of knowledge learned from past experiences and allows AST to meet our public safety goals without creating a regulatory burden.

The collection of lessons learned supports the Department of Transportation’s Safety strategic objective.

**2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.**

The FAA’s Office of Commercial Space Transportation (AST) will collect lessons learned electronically using the existing website and the web-based Commercial Space Transportation Lessons Learned System (CSTLLS) (currently under development). The CSTLLS provides a central clearinghouse allowing members of the commercial space industry and the interested public to access and submit lessons learned pertaining to all commercial space and amateur rocket activities. AST will use lessons learned to encourage learning within the space community by posting lessons on a public website in a timely and consistent manner. This exchange of information will enable participants to improve safety while reducing expenses and

operating costs by promoting the recurrence of successful outcomes and preventing the recurrence of unsuccessful outcomes.

Collecting lessons learned will allow the AST to monitor trends and identify safety indicators that may lead to more targeted regulations and guidance material for the commercial space industry. Capturing lessons learned and exchanging information will also enable AST to improve the way we work and share that information, as appropriate, with the public.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical or other technological collection techniques or other forms of information technology, e.g. permitting electronic submission of responses and the basis for the decision for adopting this means of collection.**

Participation in the Lessons Learned program is voluntary and the submittal form can be completed and submitted online. Participants can provide 100% of the information in an electronic format using AST's existing website and the future Commercial Space Transportation Lessons Learned System (CSTLLS).

**4. Describe efforts to identify duplication. Show specifically why any similar information already available can be used for the purpose described in Item 2 above.**

The FAA/AST is not aware of other government agencies that collect lessons learned pertaining to commercial space and amateur rocket activities.

The National Aeronautics and Space Administration (NASA) Lessons Learned Information System (LLIS) gives the public access to search the NASA Lessons Learned database system. The NASA Lessons Learned database system is the official, reviewed learned lessons from NASA programs and projects. While publically accessible for searches, only NASA employees may submit lessons learned here.

AST's Lessons Learned System will include a link to the NASA LLIS.

**5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.**

The submittal of lessons learned is voluntary and does not represent a significant economic impact on small businesses or other small entities.

**6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.**

Not conducting the collection of information, which involves the voluntary submittal of lessons learned, will hinder the AST's efforts to identify potential trends detrimental to public safety. Also, by not conducting the collection of information, AST will be unable to share the knowledge gained from the past experiences of industry members throughout the commercial space and amateur rocket communities.

The frequency of collecting information is contingent upon the number of voluntary submittals received from the commercial space and amateur rocket communities.

**7. Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with 1320.5(d)(2)(i)-(viii).**

The voluntary submission of lessons learned follows the guidelines of 5 CFR 1320.5(d)(2)(i)-(viii).

**8. Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any) and on data elements to be recorded, disclosed, or reported.**

In an effort to judge the affected public's response to collecting and sharing lessons learned, AST consulted the Reusable Launch Vehicle Working Group (RLVWG) during the May 2009 meeting of the Commercial Space Transportation Advisory Committee (COMSTAC). On the following day, AST also consulted with the full COMSTAC, receiving favorable results.

COMSTAC membership includes senior executives from the commercial space transportation industry; representatives from the satellite industry, both manufacturers and customers; state and local government officials; representatives from firms providing insurance, financial investment and legal services for commercial space activities; and representatives from academia, space advocacy organizations, and industry associations.

As part of this effort, AST also consulted with the National Aeronautics and Space Administration (NASA) Lessons Learned Program Office.

To ensure AST meets industry needs all recommendations and suggestions, including voluntary participation, report format, and elements to record, disclose, and report, were considered and addressed.

A 60-day notice for public comments was published on May 2, 2014, vol. 79, no. 85, pages 25170-25171. No comments were received.

**9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

AST does not plan to provide any payment or gift to respondents.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.**

The purpose of the Commercial Space Transportation Lessons Learned System (CSTLLS) is to share lessons learned among members of the commercial space industry, amateur rocket community, and the public. Therefore, confidentiality of the information submitted will not be granted.

Unless granted permission otherwise, AST will remove any contact information provided by the submitter before to posting the lesson learned to the publically accessible website. AST seeks the individual contact information in the event we need to clarify the information contained in the lesson learned submittal. As part of the collection process, AST will also accept submittals from anonymous sources, thereby guaranteeing confidentiality.

Per AST internal procedures document "Lessons Learned System Process and Procedures," AST will review all submittals for sensitive information before to posting the lesson in the public CSTLLS.

**11. Provide additional justification for any questions of a sensitive nature.**

The FAA does not collect sensitive information using the "Public Lessons Learned Submittal Form."

**12. Provide estimates of hour burden of the collection information. This information should: Provide number of respondents, frequency of response, annual burden, and an explanation of how the burden was estimated.**

Presented below are estimates of cost for completing the “Public Lessons Learned Submittal Form.” The FAA estimates that the industry loaded hourly cost is \$62.59. The FAA estimates this rate by taking the median hourly wage for Aerospace Engineers, \$50.70<sup>1</sup>, and adding a private sector fringe benefit factor of 23.45%<sup>2</sup>.

Loaded Hourly Cost –  $\$50.70 \times 1.2345 = \$62.59$

As submittals are voluntary, the lowest annual burden to the industry is \$0.00. The FAA estimates the potential numbers of respondents to be 20 business entities, each using a single point of contact. This estimate includes members of the amateur rocket community, experimental permit holders, licensed launch and reentry operators, and licensed launch and reentry site operators.

On the low end, the FAA estimates it would receive a total of 20 submittals per year, one per potential respondent. On the high end, the FAA would receive 40 submittals per year. This averages to 30 submittals per year, which we provide on OMB Form 83-I as the total annual responses.

The FAA estimates it will take approximately one hour for the respondent to provide a narrative of the information leading to the discovery of a lesson learned and to complete the “Public Lessons Learned Submittal Form.”

Low Estimate

Annual Hour Burden –  $1.0 \times 20 = 20$  hours

Annual Cost Burden –  $\$62.59 \times 20 = \$1,251.80$

High Estimate

Annual Hour Burden –  $1.0 \times 40 = 40$  hours

Annual Cost Burden –  $\$62.59 \times 40 = \$2,503.60$

Summary of Industry Paperwork Costs

<b>Paperwork Hours Per Submittal</b>	<b>Low Annual Hourly Burden</b>	<b>High Annual Hourly Burden</b>	<b>Low Annual Cost Burden</b>	<b>High Annual Cost Burden</b>
1.0 hour	20 hours	40 hours	\$1,251.80	\$2,503.60

The total estimated annual paperwork burden ranges from a low of 20 to a high of 40 hours, as indicated in the preceding table. **This averages to 30 hours per year**, which we provided on OMB Form 83-I as the total annual hours requested for the annual recordkeeping and reporting

<sup>1</sup> The median hourly wage was taken from the Bureau of Labor Statistics, Occupational Employment and Wages data from May 2013, Aerospace Engineers (17-2011).

<sup>2</sup> Economic Analysis of Investment and Regulatory Decisions, Revised Guide, Federal Aviation Administration, 1998, Table 4-5, page 59.

burden. **The average of the low annual cost burden and the high annual cost burden is \$1,877.70.**

**13. Provide estimates of the total annual cost burden to respondents or recordkeepers resulting from the collection of information.**

The total estimated paperwork cost of submitting a lesson learned is presented in question #12 above.

**14. Provide estimates of annualized cost to the Federal government.**

Presented below are estimates of person-hours that the FAA would incur per lesson learned submittal evaluation and acceptance. The FAA assumes that the government personnel working in the Washington D.C. area performing the work are at a FV-I pay level. The loaded average hourly rate would be \$63.70. The FAA calculates this rate by taking the median hourly wage for government personal at the FV-I pay level, \$46.75<sup>3</sup>, and adding a fringe benefit cost factor of 36.25%<sup>4</sup>.

Median Hourly Wage –  $\$46.75 \times 1.3625 = \$63.70$

The FAA examined two scenarios. Under the low mission scenario, the FAA receives and evaluates 20 lesson learned submittals per year. Under the high mission scenario, the FAA receives and evaluates 40 lesson learned submittals per year.

The FAA estimates that it would need four hours (one hour to determine if complete enough and to identify a subject matter expert (SME), two hours for SME review, and one hour for committee acceptance and recommendation) to conduct the evaluation and acceptance process for each lesson learned submittal received.

Low Estimate

Annual Hour Burden –  $20 \times 4 = 80$  hours

Annual Cost Burden –  $\$63.70 \times 80 = \$5,096.00$

High Estimate

Annual Hour Burden –  $40 \times 4 = 160$

Annual Cost Burden –  $\$63.70 \times 160 = \$10,192.00$

Summary of FAA Paperwork Costs

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<sup>3</sup> Median hourly rate calculated using the 2014 FAA Core Compensation Plan Pay Bands table (for the locality pay area of Washington-Baltimore, DC-MD-VA-WV), FV-I ( $\$97,233 \div 2080 = \$46.75$ )

<sup>4</sup> Fringe benefit factor from OMB Memorandum 08-13, Office of Management and Budget, March 2008, page 2.

<b>Paperwork Hours Per Submittal</b>	<b>Low Annual Hourly Burden</b>	<b>High Annual Hourly Burden</b>	<b>Low Annual Cost Burden</b>	<b>High Annual Cost Burden</b>
4 hours	80 hours	160 hours	\$5,096.00	\$10,192.00

The total estimated annual FAA paperwork burden ranges from a low of 80 to a high of 160 hours, as indicated in the preceding table. **This averages to 120 hours per year. The average of the low annual cost burden and the high annual cost burden is \$7,644.00.**

**15. Explain reasons for program changes or adjustments reported in Items 13 or 14 of OMB Form 83-I.**

The salary rates for both the public and the Federal government have been adjusted to current figures.

**16. For collections of information whose results will be published, outline plans for tabulation, and publication. Address any complex analytical techniques that will be used.**

To become a viable system for information exchange, AST will publish accepted lessons learned on AST’s existing website and in the Commercial Space Transportation Lessons Learned System (CSTLLS) (under development). Each lesson received is subject to an official validation and acceptance process.

Upon receipt of a lesson learned submittal, the AST Lessons Learned Team will ensure enough information is present to proceed with the review process. Following a complete enough determination, subject matter experts will review each lesson learned using established standards outlined in AST’s internal “Lessons Learned System Process and Procedures” document. Following subject matter expert review, as applicable for lessons learned containing technical information, AST will conduct an International Trafficking in Arms Regulations (ITAR) review. Following review, each lesson learned is subject to acceptance by the Lessons Learned Committee before posting to the CSTLLS.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

The FAA is not seeking an approval to not display the expiration date.

**18. Explain each exception to the certification statement identified in Item 19, “Certification for Paperwork Reduction Act Submissions,” of OMB Form 83-I.**

There are no exceptions.