Supporting Statement
Reduction of Fuel Tank Flammability on Transport Category Airplanes

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection.

This rule will require Design Approval Holders (DAH) to conduct a flammability analysis and develop means to reduce the flammability of high flammability exposure of certain fuel tanks on large turbine-powered transport category airplanes manufactured by Boeing and Airbus. Manufacturers of auxiliary fuel tanks are also required to conduct a flammability assessment as well as develop design changes if their STC auxiliary fuel tank adversely impacts the performance of any flammability means installed by Boeing or Airbus. The DAH requirements include submitting a plan to the FAA detailing how they intend to comply. In addition, this rule requires operators of the affected airplanes put into service after 1992 with high flammability exposure fuel tanks, to incorporate fuel tank flammability reduction means.

Boeing and Airbus will be required to provide a semi-annual report to the FAA that contains reliability data for the Flammability Reduction Means (FRM). This is needed because the safety of the fleet depends upon the reliability of the FRM and if the reliability does not meet that predicted at the time the system is certified airworthiness directives may be needed. Note, there is no specific reporting requirement for operators because the data would be obtained through normal business agreements. Operators and the manufacturers already have agreements to gather data, such as warranty claims and engine and airplane reliability submitted to the DAH for Extended Twin Operations.

This collection of information supports the DOT strategic goal of safety.

2. Indicate how, by whom, and for what purpose the information is to be used.

Design approval holders will use the flammability analysis documentation to demonstrate to their FAA Oversight Office that they are compliant with the rule.

The compliance planning information will be necessary to ensure that design approval holders fully understand the requirements, correct any deficiencies in planning in a timely manner, and are able to provide the information needed by the operators for the operators' timely compliance with the rule.

Semi-annual reports submitted by design approval holders, such as Boeing, Airbus and several auxiliary fuel tank manufacturers will provide listing of component failures discovered during scheduled or unscheduled maintenance so that the reliability of the flammability reduction means can be verified by the FAA. The FAA will use this information to initiate airworthiness actions if poor reliability is observed.

3. **Describe any consideration of information technology used to reduce burden as well as any technical or legal obstacles to reducing burden.**

Per the rule, certain documents developed by design approval holders will be submitted to the FAA for review and approval. Therefore, there is no technical or legal way for a design approval holder to reduce the burden.

Design approval holders will submit a paper copy of the documents in order for the FAA to log them into its database. In the future, the FAA will be able to accept electronic submissions of the required documents. The FAA is actively working with industry on the administrative and legal aspects of such submissions. Until such time, the FAA will allow TC holders and STC holders to submit draft documents electronically for review. We estimate that approximately 10% of the operators will submit the information electronically.

4. **Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purpose(s) described in 2 above.**

These unique documents will be developed by design approval holders to comply with this rule. There is no evidence of duplication as this information is not currently available elsewhere.

5. **If the collection of information has a significant impact on a substantial number of small businesses or other small entities (item 14 of the Paperwork Reduction Act submission form), describe the methods used to minimize burden.**

The FAA estimates that the collection of information will not have a significant impact on a substantial number of small entities because the only entities affected by the collection of information will be design approval holders and only a few (not a substantial number) affected design approval holders are small entities.

6. **Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently.**

If the collection was not conducted or was conducted less frequently, then it would be impossible for the FAA to monitor compliance with the reliability requirements of the rule and possibly mandate safety improvements if the system reliability drops below that required by the regulation.

7. **Explain any special circumstances that require the collection to be conducted in a manner inconsistent with the general information collection guidelines in 5 CFR 1320.5(d)(2)(i)-(viii).**

None.

8. Describe efforts to consult 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), on the data elements to be recorded, disclosed, or reported.

The FAA based this rule on a recommendation from the Aviation Rulemaking Advisory Committee (ARAC), which comprises, in part, representatives from various type certificate holders and operators. We considered their recommended design concept utilizing a single string flammability reduction means, that is dependent upon the reliability of the system components, when developing the data submittal and reporting requirements in this rule.

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

Not applicable.

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

Respondents are not given assurance of confidentiality. Certain records will be available through the Freedom of Information Act.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

There are no questions of a sensitive nature.

12. Provide estimates of the hourly burden of the collection of information.

The largest paperwork burden will be a one-time effort (spread over 3 years) associated with the Design approval holders (TC and STC holders) to develop design changes. Operators will also need to update their maintenance programs, including maintenance manuals, to include the design changes. The basis for these estimates is the industry Aviation Rulemaking Advisory Committee report, which provided hours for each of the 3 major areas of paperwork. Based on an aerospace engineer total compensation rate of $110 an hour, the total burden will be as follows:

Documents Required to Show Compliance with the Final Rule	Hours	Total Cost (in Millions of $2007)
Application to FAA for Amended TC or STC	405,000	$44.550
Documents (Specifications, ICDs, etc.)	30,900	$ 3.399

Revisions to Manuals (Flight Manuals, Operations, and Maintenance) for FRM Systems	29,500	$ 3..245
Total	465,400	$51.194

As these recordkeeping costs will be spread out evenly over the three years, the yearly burden will be $17.065 million and involve 155,133 hours.

After this initial 3-year period, this rule will result in an annual recordkeeping and reporting burden of 4,000 hours. This burden is based on five (5) design approval holders submitting 40 total reports per year requiring an average of 100 hours to complete each report. All records that will be generated to verify the installation, to record any fuel tank system inerting failures, and to record any maintenance will use forms currently required by the FAA.

The FAA computed the annual recordkeeping (Total Pages) burden by analyzing the necessary paperwork requirements needed to satisfy each process of the rule.

13. Provide an estimate of the total annual cost burden to respondents or record keepers resulting from the collection of information.

There are no costs the FAA has not already included in Question 12.

14. Provide estimates of annualized cost to the Federal Government.

Conservatively assuming that half of the time spent by the design approval holders in developing the compliance plan and the flammability reduction means analysis will be spent by the FAA reviewing the analysis, the average annualized cost to the Federal Government will be $3.2 million.

15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-1.

This is a new collection.

16. For collections of information whose results will be published, outline plans for tabulation, and publication.

Not applicable, the FAA will not publish the information collected.

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.

Approval to not display the expiration date is not requested.

18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act submissions," of OMB Form 83-1.

There are no exceptions.