

Supporting Statement

Maintenance, Preventive Maintenance, Rebuilding, and Alterations
OMB Control Number: 2120-0020

Justification:

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

Title 49, United States Code, Section 44701/44702, specifically empowers the Secretary of Transportation to prescribe reasonable rules and regulations and minimum standards governing, in the interest of safety, the inspection, servicing, and overhaul of aircraft, aircraft engines, propellers, and appliances, including provision of examinations and reports the Secretary may accept in lieu of those made by its officers and employees.

The information collection associated with FAR 43 is necessary to ensure that maintenance, rebuilding, or alteration of aircraft, aircraft components, etc., is performed by qualified individuals and at proper intervals. Further, proper maintenance records are essential to ensure that an aircraft is properly maintained and is mechanically safe for flight. Clearly, aircraft airworthiness, through proper maintenance, is a major component of aviation safety. This provides a record of all major modifications, repairs, and alterations performed on U.S. civil registered aircraft.

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

This collection of information involves the mandatory reporting and recordkeeping of maintenance, major modifications, repairs, and alterations performed on U.S. civil registered aircraft. The reporting and maintenance recording required by FAR 43 may only be done by certified mechanics, repair stations, and air carriers authorized to perform maintenance. Pilots are also authorized to perform and record preventive maintenance, however, the authorization applies only to those pilots who own or lease their aircraft for private operation for preventative maintenance only. The reporting and maintenance recordkeeping requirements of FAR 43 is an ongoing process and initiated on occasion as needed at the time of maintenance, preventive maintenance, rebuilding and alteration of an aircraft airframe, aircraft engine, propeller, or appliance. All information on completed 337 forms are submitted to FAA division AFS-750 through electronic process or paper copy. Information collected is aircraft data arranged by registration "N" number, owner name and

address, with certificate number of the person accomplishing the work. The form also contains detailed information of the work accomplished. The information is then recorded in the aircraft official database record to be kept indefinitely. This is accomplished to enhance safety by ensuring quality workmanship and parts are utilized for the continued operational safety of the flying public and passengers aboard the aircraft and on the ground.

This information is collected for all aircraft undergoing maintenance, repair or alteration. Some allowances have been given to FAR part 121 air carriers to authorize an alternative method of reporting major repairs and alterations. This alternative method is a record keeping system approved by the local office through company procedures to maintain and approve the repairs and alterations for their aircraft in a permanent record. This is only accomplished by 80 % of the certificated air carriers. The remaining 20 % still utilize Form 337 for these modifications to their aircraft under their operational authority.

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.

FAA Form 337 is found on the FAA website located on the FAA Homepage. The form is currently in a pdf fillable format for ease of completion. This also provides a backup copy for the facility or mechanic to retain for his/her records. Also, similar or identical type installations in different U.S. registered aircraft can be quickly reproduced on the computer by merely changing the aircraft information section.

Respondents may continue to use the system termed **eform service** (<https://eformservice.faa.gov/eForms.aspx>) developed with interactive automation capability and reporting functionality. This may be used 100%, some do not have the electronic capability so the paper copy is still available.

4. Describe efforts to identify duplication.

Efforts are continually made to reduce both duplication and information collection burden through regulatory review of FAR 43. We have reviewed other FAA public-use reports and find no duplication. FAR 121 air carriers have been allowed by regulation to incorporate a form and manner acceptable to the Administrator to record all major repairs, alterations and modifications in lieu of the FAA Form 337. This can be an engineering order or format of their own design, and approved by the FAA

in the company manual. This reduces the reporting and recording requirement thus reducing the burden of the air carrier operator. These records are maintained by the certificate holder and are transferred to the new owner/operator upon sale of the aircraft and are not submitted to the FAA Registry for retention but have to be reviewed by the local FAA office. This collection is accounted for in the review of the records by the FAA local office and historical records of the aircraft. This affects a total fleet of 5,406 air carrier aircraft that do not require the use of the FAA Form 337. We estimate approximately 20 percent of the carriers opt to use the FAA Form 337 in lieu of creating their own format which equates to 1,081 air carrier aircraft still using the form. The reporting and recordkeeping information required by FAR 43 can only be supplied by airmen or maintenance facilities providing the information. The information is not available from any other source.

5. *If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.*

Our information collection requirements are kept to the minimum necessary to ensure compliance with FAR 43. FAA's airworthiness inspectors in the field provide special assistance, as needed, to individual mechanics and small repair stations that may require more support.

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.*

If the collection is not conducted, or conducted less frequently, FAA would be unable to determine if aircraft, airframe, aircraft engine, propeller, appliance, or component part overhauls were accomplished in accordance with the regulations. This is accomplished to enhance safety by ensuring quality workmanship and parts are utilized for the continued operational safety of the flying public and passengers aboard the aircraft and on the ground. The collection of this information does not occur at a preset time dictated by our regulations. Response is determined by the need to accomplish maintenance.

7. *Explain any special circumstances that would cause an information collection to be conducted in a manner:*

- ***requiring respondents to report information to the agency more often than quarterly;***

- *requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;*
- *requiring respondents to submit more than an original and two copies of any document; requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;*
- *in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;*
- *requiring the use of a statistical data classification that has not been reviewed and approved by OMB;*
- *that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or*
- *requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.*

This information collection is conducted in a manner consistent with the guidelines in 5 CFR 1320.5(d)(2)(i)-(viii).

There is one exception concerning limitation of record retention to three years. FAR 43 is concerned with maintenance. A portion of FAR 43 is concerned with maintenance record entries (Sections 43.9(a), 43.9(b), and 43.11(a), as well as, the retention period for maintenance for the life of the aircraft as specified in FAR 91.417(b)(2). Maintenance records must be retained for the life of an aircraft and transferred to the new owner during the sale of the aircraft.

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 record keeping, disclosure, or reporting format (if any) and the data elements to be recorded, disclosed, or reported.*

A Federal Register Notice published on May 13, 2019 (84 FR 20946), solicited public comment. No comments were received.

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

Payments or gifts are not provided to respondents.

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

Respondents are given no assurance of confidentiality.

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 hour burden of the collection of information. The statements should: Indicate the number of respondents, frequency of response, annual hour burden and an explanation of how the burden was estimated. If this request is for approval covers more than one form, provide separate hour burden estimates for each form. Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.

This data is based on Record submission totals from AFS-750 and electronic data derived from eForms portal. In a 12 month period starting on October 2016 to September 2017 there were 54,237 actual records completed and submitted to the aircraft records division. Total aircraft in the data base is 271,185. On average one out of 5 aircraft respond per year, resulting in 54,237 respondents annually.

FAR 121 air carriers have been allowed by regulation to incorporate a form and manner acceptable to the Administrator to record all major repairs, alterations and modifications in lieu of the FAA Form 337. This can be an engineering order or format of their own design, and approved by the FAA in the company manual. This reduces the reporting and recording requirement thus reducing the burden of the air carrier operator. These records are maintained by the certificate holder and are transferred to the new owner/operator upon sale of the aircraft and are not submitted

to the FAA Registry for retention but have to be reviewed by the local FAA office. This collection is accounted for in the review of the records by the FAA local office and historical records of the aircraft. This affects a total fleet of 5,406 air carrier aircraft that do not require the use of the FAA Form 337. We estimate approximately 20 percent of the carriers opt to use the FAA Form 337 in lieu of creating their own format which equates to 1,081 air carrier aircraft still using the form. This 1,081 aircraft are accounted for in the 54,237 records submitted in the total records for the year sample used. The remaining 4,325 aircraft utilize the record keeping system authorized in the approved processes of the air carrier system. The collection is performed as a record review method instead of a record collection in AFS-750.

Manpower cost is calculated by the average wage of aircraft mechanics in the industry today.

For Part 43 aircraft and 20 % of air carrier aircraft, each 337 form takes approximately .5 hours to complete. 27,119 hours are spent annually completing 337 forms at a median wage of \$30.32¹ for workers in the aircraft and avionics equipment mechanics occupation. This base wage is multiplied by 2 to account for a fringe benefits rate of 69 percent and an overhead rate of 31 percent.² This equates to a fully loaded hourly cost of \$60.64 and a total annual cost burden of \$1,644,496.16 spent to record the major repairs and alterations capturing the modifications performed on airworthy aircraft flying in the NAS today.

Part 43 only

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents	54,237		
# of Responses per respondent	1		
Time per Response	.5 hours		
Total # of responses	54237		
Total burden (hours)	27119		

The other Part 121 authorized to perform major repairs and alterations through authorizations granted from the local office in the aircraft records account for the

¹ <https://www.bls.gov/ooh/installation-maintenance-and-repair/aircraft-and-avionics-equipment-mechanics-and-technicians.htm#tab-1>

² Source: U.S. Department of Health and Human Services, “Guidelines for Regulatory Impact Analysis” (2016), https://aspe.hhs.gov/system/files/pdf/242926/HHS_RIAGuidance.pdf. On page 30, HHS states, “As an interim default, while HHS conducts more research, analysts should assume overhead costs (including benefits) are equal to 100 percent of pretax wages....” To isolate the overhead rate, the Department subtracted the benefits rate of 69 percent from the recommended rate of 100 percent.

remaining 4325 aircraft. Three out of every 5 aircraft submit a major repair and alteration document annually in the records. This equates to 2,595 respondents per year.

Recording major repairs and alterations takes approximately .5 hours to complete. 1298 hours are spent at a median wage of workers in the the aircraft and avionics equipment mechanics occupation making \$30.32³ an hour. This base wage is multiplied by 2 to account for a fringe benefits rate of 69 percent and an overhead rate of 31 percent.⁴ This equates to a fully loaded hourly cost of \$60.64 and a total annual cost burden of \$78,710.72

$$1298 \text{ hrs} \times \$60.64 = \$78,710.72$$

Part 121

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents		2595	
# of Responses per respondent		1	
Time per Response		.5 hours	
Total # of responses		2595	
Total burden (hours)		1298	

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

There are no additional costs associated with this collection not already included in item number 12.

14. Provide estimates of annualized cost to the Federal Government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses and any other expense that would not have been incurred without this collection of information.

³ <https://www.bls.gov/ooh/installation-maintenance-and-repair/aircraft-and-avionics-equipment-mechanics-and-technicians.htm#tab-1>

⁴ Source: U.S. Department of Health and Human Services, “Guidelines for Regulatory Impact Analysis” (2016), https://aspe.hhs.gov/system/files/pdf/242926/HHS_RIAGuidance.pdf. On page 30, HHS states, “As an interim default, while HHS conducts more research, analysts should assume overhead costs (including benefits) are equal to 100 percent of pretax wages....” To isolate the overhead rate, the Department subtracted the benefits rate of 69 percent from the recommended rate of 100 percent.

The wage rates of Federal employees were estimated using the midpoint (Step 5) for Grade 12 of the General Schedule, \$35.02⁵. This base hourly wage rate was multiplied by 2 to account for a fringe benefits rate of 69 percent and an overhead rate of 31 percent.⁶ Average hourly wage is \$70/hr., with fringe and overhead, taking an average of 15 minutes to process, whether electronic or paper, this equates to:

The estimated annual cost to the Federal government is \$237,286 based on the processing of 54,237 FAA Form 337's.

Number of FAA Form 337's processed:	54,237
Estimated hours per form	.25 hrs (15 minutes)
Estimated cost per report on Form 337	\$17.50
Estimated cost	\$237,286

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

There have been no program changes since the last submission. The part 43 Form 337 estimates remain the same, however, we have added information to correctly capture the Part 121 recordkeeping alternative method.

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

There are no plans to publish this information for statistical or other purposes.

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.

We are not seeking this approval.

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

There are no exceptions.

⁵ https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2019/GS_h.pdf

⁶ Source: U.S. Department of Health and Human Services, "Guidelines for Regulatory Impact Analysis" (2016), https://aspe.hhs.gov/system/files/pdf/242926/HHS_RIAGuidance.pdf. On page 30, HHS states, "As an interim default, while HHS conducts more research, analysts should assume overhead costs (including benefits) are equal to 100 percent of pretax wages...." To isolate the overhead rate, the Department subtracted the benefits rate of 69 percent from the recommended rate of 100 percent.

