

# **INFORMATION COLLECTION SUPPORTING STATEMENT**

## **TITLE**

### **Final Rule**

- 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 or authorizing the collection of information. (Annotate the CFR parts/sections affected).***

During several aircraft accident investigations, National Transportation Safety Board found that some digital flight data recorder systems (DFDRS) were filtering flight recorder parameter signals before they were recorded. As a result, the recorded data did not accurately reflect the aircraft's performance or the movements of the flight control surfaces. Such signal filtering both hampered and delayed the investigations.

In 2006, the FAA issued a notice of proposed rulemaking (NPRM) that proposed a prohibition on filtering certain original flight data sensor signals (November 15, 2006, 71 FR 66634). This proposal had no new information collection requirements. The comments received in response to the 2006 NPRM alerted the FAA to several features of the proposed prohibition that would have had significantly more impact than the agency predicted.

In 2008, the FAA issued a supplemental NPRM (SNPRM) that changed the scope of the initial proposal (August 15, 2008, 73 FR 47857). The SNPRM proposed that recording of filtered flight data be allowed if a certificate holder could demonstrate that the 'filtered' recorded data meet the recording requirements of the regulations, and that the original sensor signal data could be accurately reconstructed using a documented, repeatable process. This change would create a new information collection requirement and comment was requested on the burden information contained in the SNPRM.

The final rule applies to each aircraft operated under Title 14 Code of Federal Regulations parts 121, 125, and 135 required to have a DFDR system. These aircraft are operated primarily by scheduled air carriers and non-scheduled part 135 airplane and rotorcraft operators. Aircraft operated under other parts of Title 14 are not affected. The final rule requires operators to have a one-time engineering analysis performed to evaluate whether the DFDR systems on their airplanes record certain flight data parameter signals after they have been filtered. Operators have 18 months from the effective date of the rule to review their DFDR systems and create a record that indicates whether the DFDR system on each airplane is filtering any of the parameters included in the "no filter list." If any of those parameters are being filtered, the record must also indicate which are affected. If no parameters are being filtered, that record entry should be made at the time of the determination, and an operator need take no further action unless a change is made to a DFDR system.

The final rule does not provide a form or template for recording the new data because the existing regulations already require operators to maintain certain flight data recorder correlation documentation. Both operators and the FAA are familiar with this practice and any change would cause confusion. Therefore, the additional record required by this final rule will be maintained as

part of this existing documentation. The requirement to record and maintain this data is found in the following new part 121 requirements (see highlighted text)(identical requirements were added to parts 125 and 135):

**§ 121.346 Flight Data Recorders: Filtered Data**

(c) For a parameter described in § 121.344(a) (12) through (17), (42), or (88), or the corresponding parameter in Appendix B of this part, if the recorded signal value is filtered and does not meet the requirements of Appendix B or M of this part, as applicable, the certificate holder must:

(1) Remove the filtering and ensure that the recorded signal value meets the requirements of Appendix B or M of this part, as applicable; or

(2) Demonstrate by test and analysis that the original sensor signal value can be reconstructed from the recorded data. This demonstration requires that:

(i) The FAA determine that the procedure and the test results submitted by the certificate holder as its compliance with paragraph (c)(2) of this section are repeatable; and

(ii) The certificate holder maintains documentation of the procedure required to reconstruct the original sensor signal value. This documentation is also subject to the requirements of § 121.344(i).

(d) Compliance. Compliance is required as follows:

(1) No later than October 20, 2011 each operator must determine, for each airplane on its operations specifications, whether the airplane's DFDR system is filtering any of the parameters listed in paragraph (c) of this section. The operator must create a record of this determination for each airplane it operates, and maintain it as part of the correlation documentation required by §121.344(j)(3) of this part.

(2) For airplanes that are not filtering any listed parameter, no further action is required unless the airplane's DFDR system is modified in a manner that would cause it to meet the definition of filtering on any listed parameter.

(3) For airplanes found to be filtering a parameter listed in paragraph (c) of this section, the operator must either:

(i) No later than April 21, 2014 remove the filtering; or

(ii) No later than April 22, 2013 submit the necessary procedure and test results required by paragraph (c)(2) of this section.

(4) After April 21, 2014, no aircraft flight data recording system may filter any parameter listed in paragraph (c) of this section that does not meet the requirements of Appendix B or M of this part, unless the certificate holder possesses test and analysis procedures and the test results that have been approved by the FAA. All records of tests, analysis and procedures used to comply with this section must be maintained as part of the correlation documentation required by §121.344(j)(3) of this part.

In addition to the requirements in the final rule language, the FAA will publish additional guidance in an advisory circular. This advisory circular (AC 20-141B) is expected to be published in September 2010. The requirement to record the affected flight data sensor signals was created in 1997 when the FAA revised the DFDR regulations to require that certain aircraft be equipped to accommodate additional DFDR parameters (Revisions to Digital Flight Data

Recorder Rules; Final Rule (62 FR 38362, July 17, 1997)). The OMB Control Number for that data collection requirement is 2120-0616.

- 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 record created by the one-time engineering analysis will be the proof that an operator shows to the FAA that the operator has met its obligation under the rule to evaluate the DFDR systems on their airplanes. In addition, if filtering is found, the record will identify which parameters the operator must address.

- 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. Also describe any consideration of using information technology to reduce burden. [Effective 03/22/01, your response must SPECIFICALLY reference the Government Paperwork Elimination Act (GPEA), which addresses electronic filing and recordkeeping, and what you are doing to adhere to it. You must explain how you will provide a fully electronic reporting option by October 2003, or an explanation of why this is not practicable.]**

This rule does not impose any requirements for submitting information directly to the FAA so as to require the FAA to develop a fully electronic reporting option under the Government Paperwork Elimination Act. As stated above, the additional record required by this final rule will be maintained as part of this existing flight data recorder correlation documentation that each operator maintains to comply with the existing regulations. If an operator already maintains this documentation electronically, the new data may be so maintained.

- 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 Item 2 above.**

This information collection is not a duplication of other reporting. No other Federal agency requires this record.

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

We specifically requested information regarding the effect on small entities to assist in our final analysis. The information we received indicates that there is no significant effect on a substantial number of 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.***

If the information requested in this final rule is not collected, the agency would have no way of knowing whether operators are complying with this regulation. In case of an accident, investigative authorities may not have the data needed to interpret collected flight data, which could hamper a determination of the probable cause of an accident.

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).***

There are no special circumstances.

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), and on the data elements to be recorded, disclosed, or reported. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d) soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.***

In 2006, the FAA issued an NPRM. The comments received alerted us to several features of the proposed prohibition that could have significantly more impact than we would have predicted. The FAA agreed and went back to the public with an SNPRM. The comments received generally supported the filtered data reconstruction option. The FAA is publishing a final rule adopting the option to record filtered data.

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

No payment or gift of any kind is included to any respondent.

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

The FAA assures operating certificate holders confidentiality in retaining data related to the reconstruction tests, analyses, and procedures.

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

There are no sensitive questions in this collection of information.

**12. Provide estimates of hour burden of the collection of information.**

We are estimating that it will take the operating certificate holders 15 minutes to make an entry in each of its aircraft correlation documentation for 7,623 aircraft. Therefore, one time hours for operators to record results are 1,906 hours (7,623 aircraft at 15 minutes an aircraft). Using the FAA's burdened labor rate for engineers and maintenance foremen of \$83.12 per hour<sup>1</sup>, this results in a one-time cost of \$158,427.

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

Annual costs are \$0.

**14. Provide estimates of annualized cost to the Federal Government. Also, provide a description of the method used to estimate cost, and other expenses that would not have been incurred without this collection of information.**

There are no annual costs to the Federal Government.

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

There are no program changes or adjustments reported in Items 13 or 14 of OMB Form 83-I.

**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. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.**

There is nothing to publish.

**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.**

There is no display request.

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

No exceptions to Item 19.

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<sup>1</sup> GRA, Incorporated, *Economic Values for FAA Investment and Regulatory Decisions. A Guide*, Final Report, September 30, 2008, Table 7-1A: 2008 Mean Burdened Hourly Labor Rates of Aeronautical Engineers and Aviation Mechanics, p. 7-3.