

INFORMATION COLLECTION SUPPORTING STATEMENT

Flightcrew Member Duty and Rest Requirements Final Rule

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

The FAA is proposing data collection, in the form of reports, from air carriers certificated under Title 14 Code of Federal Aviation Regulations (14 CFR) part 121 as prescribed in 14 CFR part 117, §§ 117.11 and 117.19 of the Flightcrew Member Duty and Rest Requirements. This reporting requirement would be required any time the certificate holder exceeded a maximum daily flight time limit or a maximum daily Flight Duty Period (FDP) limit.

The maximum daily flight time and FDP limits are established to mitigate the potential effects of flightcrew member fatigue by reducing exposure to long duty days. Maintaining realistic scheduling is a critical element to fatigue mitigation as it is the principal element to assuring that the certificate holder's actual flight times and FDPs remain within the applicable limitations.

The final rule contains provisions when a certificate holder exceeds a maximum daily FDP limit or a maximum daily flight time limit. The FDP limit is defined as a period that begins when a flightcrew member is required to report for duty with the intention of conducting a flight, a series of flights, or positioning or ferrying flights, and ends when the aircraft is parked after the last flight and there is no intention for further aircraft movement by the same flightcrew member. The maximum daily flight time limit resides within the constraints of the FDP.

The maximum daily FDP limits are located in one of two FDP tables referred to as Tables B and C of 14 CFR part 117. Table B prescribes the maximum FDP limits for two pilot crews (referred to as Unaugmented) and Table C prescribes the maximum FDP limits for three and four pilot crews (referred to as augmented).

The length of the maximum FDP limits in Table B is predicated upon the report time. The limit decreases incrementally based upon the time of day the flightcrew member is scheduled for that FDP and the number of scheduled segments. Since nighttime operations present the greatest risk for fatigue exposure, reducing the length of the FDP minimizes the risk exposure during late evening and night operations. Therefore, FDPs that start during the morning hours are longer than those that start in the late evening and night hours.

In order to increase the length of a maximum daily FDP, the flightcrew must be augmented by either one or two additional pilots above the minimum required as a means to mitigate this risk exposure. Table C prescribes the length of their maximum

daily FDP based upon the FDP scheduled start time and the classification of onboard rest facility used by the flightcrew.

Each FDP limit depicted in Table B or C is constructed with a thirty-minute (30) buffer at the end of the FDP, which is not reflected as part of the maximum daily FDP limit. The purpose for the buffer is to provide limited relief should the flightcrew member's actual FDP time exceed the maximum daily FDP limit by no more than 30-minutes. With the buffer resting at the end of the maximum daily FDP limit, the certificate holder may not schedule into this buffer. If the actual FDP time exceeds the 30 minute buffer, then the certificate holder must apply FDP extensions in accordance with 14 CFR § 117.19, *Flight Duty Period Extensions*.

The Federal Aviation Administration (FAA) recognizes that certain conditions occur such as unforecast weather conditions, air traffic delays or operational irregularities that may not be known by the certificate holder and pilot prior to takeoff. The result of these occurrences may cause delays, which present the potential for the flightcrew member's maximum daily FDP to be exceeded. In response to this situation, the FAA has adopted in its final rule limited relief in the form of an extension to a maximum FDP. This relief allows the certificate holder, upon consent of the pilot in command, to extend the length of the maximum daily FDP by a total of two hours beyond the daily FDP limit.

The final rule requires the certificate holder to report any time that they use a FDP extension. Each certificate holder must report to the FAA within 10 days any flight duty period that exceeded the maximum flight duty period permitted in Tables B and C by more than 30 minutes. The report must contain a description of the extended flight duty period, the circumstances surrounding the need for the extension, and if the circumstances giving rise to the extension were determined by the Administrator to be within the certificate holder's control, the corrective action(s) that the certificate holder intends to take to minimize the need for future extensions. The certificated holder must implement the required corrective action(s) within 30 days from the date of the extended flight duty period.

Table A of Part 117 depicts the maximum daily flight time limits for unaugmented flight operations and § 117.11(a) depicts the flight time limitations for augmented flight operations. In the event a certificate holder extends the maximum daily flight time limit for a flightcrew member depicted in Table A or §117.11, *Flight Time Limitations*, the certificate holder must report this extension to the FAA within 10 days. The report must contain the length of the extension a description of the circumstances surrounding the exceeded flight time.

Certificate holders conducting operations pursuant to contracts with the U.S. Government or pursuant to a deviation under § 119.57, *Obtaining Deviation Authority to Perform an Emergency Operation*, may encounter circumstances that could prevent the flightcrew members from being relieved by another crew at the end of their applicable flight duty period or may need to exceed their applicable flight duty period

to move the aircraft to another location where the flightcrew members can be safely relieved by another crew. In this event, the pilot-in-command may determine that maximum applicable flight duty periods must be exceeded to the extent necessary to allow the flightcrew to fly to the closest destination where they can safely be relieved from duty by another flightcrew or can receive the requisite amount of rest prior to commencing their next flight duty period.

Should this event occur, the certificate holder must report within 10 days any flight duty period that exceeded the maximum flight duty period permitted in Tables B or C by more than 30 minutes. The report must contain a description of the extended flight duty period, the circumstances surrounding the need for the extension, and if the circumstances requiring the extension were within the certificate holder's control, the corrective action(s) that the certificate holder intends to take to minimize the need for future extensions. The certificated holder must implement the required corrective action(s) within 30 days from the date of the extended flight duty period.

The final rule will allow each air carrier to develop a Fatigue Risk Management System (FRMS) if they wish. FRMS is a voluntary program in the final rule. The air carrier will be required to collect data specific to the need of the operation for which they will seek an FRMS authorization. It will result in an annual recordkeeping and reporting burden if some of industry carriers eventually adopt the system so that they need to report the related activities to the FAA.

Each air carrier will be required to develop specific elements, as prescribed in the rule, and incorporate these elements into the training program. Once the elements have been incorporated, the air carrier must submit the revised training program for approval.

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

The certificate holder is responsible for submitting this report to the FAA no later than 10 days from the date of the extension. The method for reporting must be in writing and transmitted via electronic mail or by facsimile. The purpose for this report is to notify the FAA that the certificate holder has extended a flight time and/or FDP limitation. The report must contain a description of the extended flight duty period, the circumstances surrounding the need for the extension, and if the circumstances giving rise to the extension were determined by the FAA to be within the certificate holder's control, the corrective action(s) that the certificate holder intends to take to minimize the need for future extensions. The certificated holder must implement the required corrective action(s) within 30 days from the date of the extended flight duty period.

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, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.*

All reports will be written and transmitted by either electronic mail or facsimile. This method minimizes the burden for data collection while expeditiously reporting the flight time or FDP extension occurrence.

- 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.**

The FAA currently has a program referred to as Voluntary Disclosure Reporting Program (VDRP). The purpose of the program is to allow the certificate holder to voluntarily disclose to the FAA when they have violated a particular limitation or rule. This report must be submitted to the FAA with 24 hours after the certificate holder learns that they have violated a limitation or rule. It requires the certificate holder to investigate and determine a root-cause for the violation and develop a comprehensive fix to ensure the violation will not occur again. Then the certificate holder has 30 days from the violation to implement the comprehensive fix.

The reporting requirement for this final rule is modeled after the VDRP. However, VDRP is not regulated in the sense that it is required; it is simply a voluntary program. Therefore, since this reporting requirement will be regulatory, the VDRP cannot be used to report; thus, there is no duplicate reporting system.

- 5. If the collection of information has a significant impact on a substantial number of small businesses or other small entities (item 15 of the Paperwork Reduction Act submission form), describe the methods used to minimize burden.**

The FAA does not feel this reporting requirement will have a significant 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.**

The FAA recognizes that certain conditions occur such as unforecast weather conditions, air traffic delays or operational and mechanical irregularities that may not be known by the certificate holder and/or pilot prior to takeoff. As a result of these occurrences delays can cause the flightcrew member's actual daily flight time or FDP to exceed maximum daily limit. In order to prevent such occurrences, the certificate holder would have to build substantial buffers into the schedule, which places an unnecessary burden on the certificate holder in the form of lost utilization. Therefore, the final rule provides the certificate holder with limited relief; thus, reducing a burden on the certificate holder by allowing them to extend the flight crew member's FDP by a maximum of two hours or the flight time limit to reach their final destination or alternate airport.

If there were no reporting requirements, the FAA could not track certificate holders utilizing extensions of flight time and FDPs. Without this data collection requirement, as a safety sensitive item, the certificate holders would face a utilization burdens as a result of buffers that must be built into schedules.

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).

This information is collected in a manner consistent with the general information collection guidelines.

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.

In the Notice of Proposed Rulemaking published on September 14, 2010 (75 FR 55852), the FAA proposed that each certificate holder must submit a report every two months detailing the adjustments described above (the overall schedule reliability and pairing-specific reliability) and include the following information: (1) the carrier's entire crew pairing schedule for the previous 2-month period, including the total anticipated length of each set of crew pairings and the regulatory limit on such pairings; (2) the actual length of each set of crew pairing; and (3) the percentage of discrepancy between the two data sets on both a cumulative, and pairing-specific basis.

No commenters supported the requirements for schedule reliability as proposed. Many commenters argued that the proposed requirements were unnecessary as they would not do anything to mitigate transient, cumulative or chronic fatigue. Others believe that the proposal was seriously flawed and that adjustments to the proposed requirements were necessary.

The FAA agreed that FDPs that exceed the maximum FDP permitted under Table B are the ones that directly impact fatigue and must be addressed by the certificate holder. Adopting this approach will make the certificate holder accountable to schedule FDPs realistically.

The FAA agreed that an extension must be based on exceeding the maximum FDP permitted in Table B and C. It is unreasonable to limit extensions on FDPs that are less than what the certificate holder can legally schedule. In addition, there is a 30 minute buffer attached to each FDP to provide flexibility to deal with marginal delays.

In lieu of the reporting requirements proposed under the schedule reliability, the FAA adopted a two-prong requirement for reporting extended FDPs. In addressing unforeseen operational circumstances, it is critical to distinguish those situations that

arise prior to takeoff and those that arise after takeoff. Under both situations, the certificate holder must report to the FAA within 10 days any FDP that exceeded the maximum FDP permitted by Table B or C by more than 30 minutes. In this report, the certificate holder must describe the FDP and the circumstances surrounding the need for an extension. If the situation giving rise to the extension occurred prior to takeoff, the certificate holder must address in this report whether the circumstances giving rise to the extension were within its control. Since it is prior to takeoff, once the certificate holder becomes aware of such issue, the certificate holder and pilot-in-command have discretion to evaluate the situation and determine whether it is permissible to extend the applicable FDPs and best to continue with the flight or whether it is appropriate to replace the affected flightcrew member. Therefore, in situations where the circumstances were within the certificate holder's control, the certificate holder must include in its report the corrective actions that it intends to take to minimize the need for future extensions. The certificate holder then has 30 days to implement such corrective actions. For situations that are not within the certificate holder's control, there likely is not corrective action that can be taken. Therefore, under these scenarios, the certificate holder must simply report the extension within 10 days of occurring and provide the details surrounding the need for the extended FDP.

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

No payments or gifts will be provided.

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

We offer no assurance of confidentiality.

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.

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

The paperwork burden comprises of five areas, fatigue risk management system §117.7, fatigue training §117.9, flight time limitation §117.11, and flight duty period extension reporting §117.19 and Emergency and government sponsored operations §117.29. The following analyses were conducted under Paperwork Reduction Act of 1995 (44 U.S.C. 3501).

- 1) PRA analysis for reporting fatigue risk management system (FRMS) §117.7 provision

The final rule will allow each air carrier to develop a Fatigue Risk Management System (FRMS) if it wishes. FRMS is a voluntary program in the final rule. It will result in an annual recordkeeping and reporting burden if some of industry carriers eventually adopt the system so that they need to report the related activities to the FAA. Total FRMS annualized paperwork burden is determined by the numbers of FRMS to be developed and FRMS reporting cost per responders. FAA estimated that FRMS will incur the paperwork burden about \$14,950 annually, \$149,500 nominal cost for 10-years or \$99,186 present value at 7 %. FAA took steps to arrive the estimate as follows.

- a. Number of respondents (air carriers): the FAA estimated approximately 20 carriers or respondents;
- b. Estimated time of paperwork: about 11.5 hours per air carries and 230 hours in total for data collection, annual FRMS record-keeping and reporting required by the FAA;
- c. Average hourly wage rate of a FRMS information respondent (manager level): \$65 per hour for reporting and analyzing FRMS data;
- d. FRMS paperwork hour estimation: total 230 hours (11.5 hours x 20 estimated carriers);
- e. Total annualized cost of FRMS paperwork is about \$14,950 ($\$1,253.50 \times 20$) for the estimated 20 carriers.
- f. The nominal cost for 10-year is \$149,500 or \$99,186 present value at 7 %.

2) PRA analysis for fatigue training §117.9 provision

The fatigue training requirement in the final rule will also result in an annual recordkeeping and reporting burden. Total fatigue training annualized paperwork burden costs are determined by the numbers of responders and fatigue training reporting cost per responders. FAA estimated that the fatigue training will incur the paperwork burden approximately 2,345 hours, \$152,425 for the first year, \$1.5 million nominal cost for 10-years or \$1 million present value at 7 %. FAA took steps to arrive the estimate as follows.

- a. Number of responders (dispatchers and managers): 67 operators;
- b. Estimated time needed for each responder: 35 hours, or 2,345 hours incurred by 67 responders;
- c. Average hourly wage rate of trainee: \$65 per hour;
- d. Fatigue training paperwork cost: \$152,425 per annum ($\$65 \text{ hourly wage rate} \times 2,345 \text{ hours}$)

3) PRA analysis for §117.11, §117.19 and §117.29 provisions

The FAA combined the cost estimates in one PRA analysis for three provisions of the final rule (§117.11, §117.19 and §117.29), since paperwork burdens for carriers to report activities that were not otherwise permitted by §117.11, §117.19 and §117.29 are the same. Reporting and recordkeeping by carriers can be done electronically by addressing the facts of events. Under the above provisions, carriers do not need to conduct complicated analyses, so that there will be no paperwork burden of analyses. In this analysis, the estimate of paperwork burden will be determined by the numbers of respondents, the frequencies of their reporting, hours required and the reporter's

wage rate. The FAA estimated the final annual paperwork burden for three provisions is \$92,250, and \$0.9 million for the 10-years nominal cost, or the present value of \$0.6 million at 7 %, by taking steps to arrive the estimate as follows.

- a. Number of respondents (air carriers): there are 67 carriers or respondents;
- b. Estimated frequencies for reporting requirements under each provision:
Although a definitive frequency is unknown and will decrease as certificate holders adapt the changes, the FAA assumes an average of 6 times per year for each provision;
- c. Estimated total frequencies of annual responses: 18 times (6 x 3) per carrier and 1,206 times (67 x 18) by 67 carriers for these three provisions of the final rule;
- d. Estimated time needed for each report for each occurrence: 30 minutes, one hundred percent of these responses will be collected electronically. The time needed for each carrier to report is about 9 hours (18 x 30 minutes), and 603 hours in total by 67 carriers for these three provisions of the final rule;
- e. Estimated hourly wage rate of reporting staff: \$65 per hour;
- f. The estimated total annual cost of reporting is about \$39,195 (603 hours x \$65);
- g. The nominal cost for 10-years is about \$0.4 million or the present value of \$0.24 million at 7%.

Summarizing the above, the annualized cost is approximately \$206,570 and the total nominal cost for 10-years about \$2.1 million (\$0.15 million +\$1.5 million+ \$0.4 million) or the present value of approximately \$1.3 million at 7% (\$0.1 + \$1 million + \$0.2 million). The public reporting burden is estimated to be an average of 47 hours for each Part 121 certificate holder and 3,178 hours, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. There will be no additional annualized cost to the Federal Government, because FAA will not add additional staffs or pay additional contractors for collecting, viewing and keeping electronic report-emails.

	Number of Respondents	Time Per Response	Annual Time Burden	Hourly Wage	Annual Cost
§117.7	20	11.5 hours	230 hours	\$65	\$14,950
§117.9	67	35 hours	2,345 hours	\$65	\$152,425
§117.11, §117.19, §117.29	67	30 minutes	603 hours	\$65	\$39,195
TOTALS			3,178 hours		\$206,570

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 not included in item 12 above.

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

Cost to the Federal Government is minimal, because FAA will not add any additional staff or paying additional contractors for collecting, viewing and keeping electronic report-emails.

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, therefore it is a program change.

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

The data collected will not be published for public consumption.

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 such approval.

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.