

## SUPPORTING STATEMENT

OMB -2120-0680

### **Part 60 -- Flight Simulation Device Initial and Continuing Qualification and Use**

#### **Justification**

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

Title 49 U.S.C., Section 44702 empowers and requires the Secretary of Transportation to issue operating certificates and to establish minimum safety standards for the operation of air carriers and those to whom such certificates are issued. Also, Title 49 U.S.C., Section 44701 empowers and requires the Administrator of the Federal Aviation Administration (FAA) to prescribe standards applicable to the accomplishment of the mission of the FAA.

This project is in direct support of the Department of Transportation's Strategic Plan – Strategic Goal – SAFETY; i.e., to promote the public health and safety by working toward the elimination of transportation-related deaths and injuries.

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

Sponsors who wish to maintain certified training centers are mandated to report to this collection. This collection is necessary to ensure that those who must comply with Title 14 CFR part 61, part 63, part 91, part 121, part 135, part 141, and part 142 are able to provide adequate crewmember training and qualification. This collection also helps to ensure safety-of-flight by ensuring those who operate under these parts of the regulation and use flight simulation in lieu of aircraft for these functions, receive and maintain complete and adequate training, testing, checking, and experience. The FAA will use the information it collects and reviews to ensure compliance and adherence to regulations and, where necessary, to take enforcement action on violators of the regulations.

**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.**

In accordance with the Government Paperwork Elimination Act (GPEA), the FAA allows and accepts electronic submission, and encourages the use of automation and electronic media for the gathering, storage, presentation, review, and transmission of all requests, records, reports, tests, or statements required by this rule with the provision that such automation or electronic media has adequate provision for security (i.e., that such submissions may not be altered after review and acceptance by the FAA) and that the systems or applications are compatible with the systems or applications used by the FAA. Today, a significant amount of information is submitted via e-

mail, on CD/DVD, or posted on SharePoint. We expect this to grow. The National Simulator Program has also designed a system to replace the current scheduling and regulatory management application in use today.

**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.**

We have reviewed other FAA public-use reports and find no duplication. Also, the FAA knows of no other agency collecting the same information. The information sought is peculiar to a specific flight simulation training device (FSTD), constructed for and delivered to a specific operator, the FSTD sponsor. The information necessary is available from that sponsor only, and is not available from any other source.

**5. If the collection of information has a significant impact on a substantial number of small businesses or other small entities (item 5 of OMB Form 83-I), describe the methods used to minimize burden.**

The FAA believes that this rule will not impact a substantial number of small businesses or other small entities; however, the material published in conjunction with this rule is informative and explanatory with regards to the requirements, and a sponsor applicant will be guided through the administrative requirements by the local principal operations inspector or training center program manager and by representatives of the National Simulator Program staff regarding any FSTD for which the sponsor applicant seeks qualification.

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

The frequency of information collection for purposes of part 60 is for original qualification and continuing qualification of FSTDs used for flightcrew member training, evaluation, or flight experience requirements in lieu of the aircraft. If the applicant sponsor does not apply initially, evaluation of the FSTD and subsequent qualification will not occur. If the sponsor does not continue to provide this information, the FAA will not be able to determine if the FSTD continues to meet the required performance and handling qualities necessary for the FSTD to substitute completely and accurately for the aircraft in training, evaluation, or flight experience requirements.

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

This collection of information is conducted in a manner consistent with the guidelines in 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 record**

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

A Notice of Proposed Rulemaking titled “Flight Simulation Training Device Qualification Standards for Extended Envelope and Adverse Weather Event Training Tasks” (RIN 2120-AK08) that included provisions affecting the burden for this collection was published in the Federal Register on July 10, 2014 (79 FR 39462) allowing 90 days for public comments. This rulemaking was initiated due to safety issues involving flight simulation and pilot training and was determined to have a minor impact on the existing information collection burden in the part 60 rule. The FAA did not receive any substantive public comments concerning the changes in the information collection burden imposed by this final rule. However, since the number of potentially affected FSTDs has changed slightly since the publication of the NPRM, the FAA has updated this supporting statement to reflect these changes. The final rule titled “Flight Simulation Training Device Qualification Standards for Extended Envelope and Adverse Weather Event Training Tasks” (RIN 2120-AK08) was published in the Federal Register on March 30, 2016 (81 FR 18178) with an effective date of May 31, 2016.

Additionally, the FAA issued a notice in the Federal Register on November 3, 2017 (82 FR 51330) and October 9, 2018 (83 FR 50740) to allow for public comments regarding the reinstatement of this information collection. This notice included additional changes to increase the number of potentially affected FSTDs (which is constantly changing) and refinements in the methodology used to estimate the information collection burden imposed by the rule since it was first published. No comments were received.

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

There are no monetary considerations for this collection of information.

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

The respondents have been 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. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

There are no questions of a sensitive nature.

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

The estimates for hours are broken down by sections of the rule below. Note that these estimates include both the one-time information collection required for new sponsors and FSTDs to initially obtain qualification as well as the annual information collection required to maintain qualification. For a cumulative estimate see the summary table at the end of this document.

### **§ 60.5 Quality Management System.**

This section calls for a sponsor to develop, review, and have approved by the FAA, policies, procedures, and processes that they will follow for each of the sections of Part 60. The purpose of this program requires the sponsor to systematically plan for and implement the requirements of part 60 and the associated Qualification Performance Standard (QPS). The estimate for this section is based on an existing sponsor count of 67 and the addition of an estimated 3 new sponsors annually, which has remained consistent during the previous three years and is expected to remain at this level. Sponsors have been sub-grouped into small, medium, and large based on the number of training centers. The nature of QMS is such that a program applies to the sponsor's entire operation however local differences from one site to another may exist. Single site sponsor QMS program will be relatively less complex than multi-site sponsor QMS programs.

#### For one-time cost on the industry side (for new sponsors seeking initial program approval):

1. To develop and implement policies, procedures and processes, small sponsors would spend 56 hours, medium sponsors 112 hours, and large sponsors 720 hours. Based on the estimated annual number of new sponsors by size, this would result in 168 hours of annual one-time information collection burden. Note that virtually all new sponsors start off with only one training center, so all new sponsors are categorized as small for their initial approval and one-time information collection burden.

2. To receive final approval on their QMS program, new sponsors must complete an on-site assessment. During this assessment, sponsor time will be required to provide and explain records, answer questions regarding processes, and demonstrate procedures. Small and medium sponsors will spend 12 hours each in performing these actions and large sponsors would spend 60 hours. Given that large sponsors have significantly more locations, more than one visit is required and thus more effort is assigned. The total estimate for this activity is 36 hours.

See Table 1 and the Summary table at the end of this document for calculations.

#### For the continuing, annual cost on the industry side (for existing sponsors):

1. When a policy, procedure or process changes, either as a result of rule changes or a sponsor's operation, the applicable section of the QMS program must be updated. The volume of these changes has been minimal and is not expected to increase. Small and medium sponsors will spend 30 minutes documenting and revising the QMS and large sponsors would spend one hour for 22 hours, 10 hours, and 3 hours respectively - a total of 35 hours.

2. In accordance with Part 60 QMS requirements, sponsors must perform self-assessments (internal audits) every six months. Each self-assessment will focus on one quarter of the Part 60 Appendix E requirements and will vary in time with the level of complexity of the sponsor's program. Small sponsors are expected to spend 6 hours performing two internal assessments

each year, medium sponsors are expected to spend 6 hours, and large sponsors 39 hours. A total of 369 hours will be spent by sponsors in this activity each year.

3. The status of each sponsor's QMS program will be reviewed every two years. This review will be in the form of an on-site assessment exactly similar to the effort outlined in the one-time cost section above. The assumptions for the estimate are the same and will result in a total of 474 hours of effort annually.

4. As part of QMS requirements sponsors must set-up a process to collect feedback. Sponsors are also required to maintain this feedback for a period of time and present it during inspection/assessment periods. Based on direct observation during the initial assessment of sponsor programs, the volume of these feedback events are estimated at 360 for small sponsors, 720 for medium sponsors, and 3,600 for large sponsors each year. Each feedback item will take a sponsor approximately five minutes to record, process and file/maintain. The total effort is 3,420 hours annually.

5. Section 60.5 requires that each sponsor identify a Management Representative and make that person known to the FAA. Initially this effort was part of the documentation of policy, process, and procedures but on a continuing basis the MR may change. Any change must be reported to the FAA. Based on direct observation the average number of changes annually is approximately one. The total effort for this is estimated at 5.6 hours each year. Section 60.5 also requires that the sponsor's MR regularly brief management on the status of their QMS program and qualification of their FSTDs. The typical period of these briefings, based on assessment of sponsor programs, is quarterly and the time involved is 30 minutes for small and medium sponsors, and 1 hour for large sponsors. The estimate of time for all sponsors is 140 hours per year.

See Table 2 and the Summary table at the end of this document for calculations.

#### **§ 60.9 Additional Responsibilities of the Sponsor.**

1. This section sets out requirements for the sponsor to establish a mechanism for receiving comments from those persons using the FSTD, posting of FSTD statements of qualification, designation of an MR, and defining MR duties. The time and costs involved are accounted for under the discussion of §60.5 Quality Management System, above.

#### **§ 60.13 FSTD Objective Data Requirements.**

The time and costs involved are addressed in § 60.15, FSTD Initial Qualification Requirements, below.

#### **§ 60.15 Initial Qualification Requirements.**

Sub-Sections (a) – (i) of this section set out the requirement that a request for evaluation must be submitted as well as the requirements for the contents of that request. With the exception of the calculation for conversion to electronic format for all QTG documents, existing practices/procedures provide an acceptable mechanism for meeting all other requirements in this section and sponsors of FSTDs will incur no *additional* time costs from present practice.

As a result of public comment from the Notice of Proposed Rulemaking titled “Flight Simulation Training Device Qualification Standards for Extended Envelope and Adverse Weather Event Training Tasks” (RIN 2120-AK08), the FAA added deviation authority to the final rule in section 60.15(c)(5). The primary purpose for including this deviation authority is to allow for FSTD sponsors to initially qualify a new FSTD using internationally recognized FSTD evaluation standards, including those issued by the International Civil Aviation Organization (ICAO) or another national aviation authority. This will improve international harmonization of FSTD evaluation standards as well as reduce redundant FSTD qualification documentation in instances where an FSTD is qualified by multiple national aviation authorities or evaluated under a bilateral agreement. Because an FSTD sponsor will have to submit a request to the FAA for the approval of a deviation, there will be an information collection burden for those FSTD sponsors or manufacturers that choose to request deviation authority. Since such deviations will generally be applicable only to those FSTDs that are undergoing an initial evaluation and the total number of initial FSTD evaluations the FAA conducts averages around 50 per year, the burden for this information collection is expected to be very small. Furthermore, it is expected that most of these deviations will be submitted by FSTD manufacturers for the initial evaluation of multiple FSTDs as provisioned for in the deviation authority section of the final rule. As a result, the number of deviation requests received by the FAA will be mainly limited to a few FSTD manufacturers and will result in a negligible information collection burden.

The estimated effort to convert paper MQTGs assumes that devices built after 2005 already have digitized copies of this guide and the sponsor simply has to provide that file to the FAA. Since the initial publication of part 60 in 2008, all existing qualified FSTDs have had their MQTGs converted and submitted to the FAA. As a result, this initial one-time information collection burden has been completed and the only remaining one-time information collection for this section will be for the estimated number of new FSTDs which are initially qualified each year. The devices have been categorized into levels which correspond to their fidelity. In general, lower level devices have smaller MQTGs and higher level devices have larger ones. This is directly related to the number of pages which have to be converted.

For one-time cost on the industry side:

The conversion of each page will take a clerk approximately 30 seconds. To see a detailed calculation based on the number of pages per device category and the numbers of devices in each category, see the tables at the end of this document. The total effort for this section is calculated at 606.3 hours.

See Table 3 and the Summary table at the end of this document for calculations.

For the continuing, annual cost on the industry side:

It is expected that approximately 14 changes per year will occur which will require a new conversion of 2 pages. It is again assumed that it will take a clerk 30 seconds to perform this conversion for a total effort estimate of 207 hours per year.

See Table 4 and the Summary table at the end of this document for calculations.

**§ 60.16 Additional Qualifications for a Currently Qualified FSTD.**

For continuing, annual cost (estimated routine modifications per year)

This section sets out the requirements for sponsors to submit to the National Simulator Program Manager, a summary of all modifications to a qualified FSTD and/or notification of seeking additional qualifications. This is a one-time effort only without a continuing cost impact once completed. The number of notifications expected under this section is 200 per year with 50% requiring a change to the MQTG. The Management Representative will spend 0.5 hours in drafting a letter to the NSPM and a clerk would spend 0.1 preparing the letter for mailing for a total effort of 120 hours. For additional tasks (beyond those originally qualified) that require qualification test guide modification, the Management Representative would spend 0.25 hours in developing an appropriate change for a total of 25 hours. The combined total would be 145 hours [120 + 25].

See Table 5 and the Summary table at the end of this document for calculations.

For one-time cost as a result of the 2016 part 60 rule change (FSTD Directive #2)

Some of these hours can be attributed to the 2016 revision to part 60 and are discussed immediately below with more details presented separately in question 15.

In the final rule to update Part 60 in 2016, FSTD Directive #2 was introduced that required Sponsors of previously qualified FSTDs to evaluate and modify FSTDs in order to qualify an FSTD to be used to conduct full stall, upset recovery, icing, gusting crosswind, and bounced landing recovery training. In the final rule, a compliance period of three years was required to conduct these modifications after the publication of the final rule in March 2016. The reporting of compliance for each of the five training tasks under the Directive will have a one-time information collection burden as described in § 60.16 and § 60.23. The training tasks described above are only required of air carriers, so it is expected that only Sponsors of Level C and Level D FSTDs used for air carrier training will report such modifications to comply with the FSTD Directive. At the time of this proposal, an estimated 322 previously qualified FSTDs may require modification in accordance with the Directive. Since the publication of the NPRM and at the time of the final rule publication, the number of previously qualified FSTDs that may be impacted by FSTD Directive #2 has increased slightly to 335. Because compliance may be reported separately for each of the five training tasks, it is estimated that up to 1675 individual notifications may be required over the three year compliance period, resulting in an average of 558 additional notifications per year. Since each modification under the FSTD Directive will require an amendment to the MQTG, this additional one-time information collection burden will be approximately 1,424 hours distributed over the three year compliance period [335 \* 5 \* 0.85]. More details are presented under Question 15.

**§ 60.19 Inspection, Maintenance, and Recurrent Evaluation Requirements.**

1. The first Sub-Section requires sponsors to conduct objective testing of each FSTD in a minimum of four segments each year as described in the appropriate Qualification Performance Standard document. This testing, which is mostly automated would take an FSTD technician 0.1 hours per test. The number of tests required depends largely on the fidelity of the device. For a detailed calculation see the table at the end of this document. The total effort required on a continuing basis is 9,566 hours. Some of these hours can be attributed to the 2016 revisions to part 60 and are discussed separately in question 15.

2. The second Sub-section also requires a functional preflight check be completed prior to use each 24 hour period. FSTD usage is estimated at five days per week for each level device and the preflight check would take an FSTD technician 0.1 hours to document / record. The total estimate for pre-flight based on the time, usage, and number of devices is 23,062 hours per year.

3. The third sub-section requires that each FSTD be recurrently evaluated by the NSPM (typically each year). The Management Representative is required to contact the NSPM to schedule this evaluation which is estimated to take approximately 0.1 hours for each simulator. During the evaluation, an inspector will select objective tests (typically three) at random to be run. It will take a technician approximately 0.1 hours to run each test. The total effort estimate for this sub-section is 355 hours annually.

4. The fourth sub-section requires each sponsor to maintain a discrepancy log for each device. The sponsor must record a description, corrective actions, and the name and date of personnel taking action for each discrepancy. Approximately five to ten discrepancies per FSTD per week are recorded on average, depending on the level of fidelity, and the time required to record and update this information is 15 minutes. The total effort estimate for this sub-section is 34,403 hours annually.

See Table 7 and the Summary table at the end of this document for calculations.

#### **§ 60.20 Logging FSTD Discrepancies.**

This Section requires each instructor, check airman, or representative of the Administrator to document any discrepancies found. The estimate for the effort is included in section 60.19.

#### **§ 60.23 Modifications to FSTDs.**

This Section describes what must be done in order to modify a qualified FSTD as well as the procedure to follow. This section is essentially an expansion of section 60.16 and the estimate of the effort involved is included in the section for 60.16.

#### **§ 60.25 Operation with Missing, Malfunctioning, or Inoperative Components.**

This Section defines the requirements associated with missing, malfunctioning, or inoperative (MMI) components in an FSTD. An MMI is essentially a special type of discrepancy. The effort associated with discrepancy logs is included in 60.19 above. However, if an MMI cannot be repaired or replaced within 30 days, approval to extend the repair/replace time must be made by the NSPM. Approximately 220 extension requests as well as updates once repaired/replaced are made annually. Each request to extend an MMI will take the Management Representative 0.1 hours to make and another 0.1 hours to report completion of repair/replace. The total effort is calculated at 44 hours annually.

See Table 8 and the Summary table at the end of this document for calculations.

#### **§ 60.31 Recordkeeping and Reporting.**

1. This section requires the sponsor to maintain certain records.
  - (a) The time and costs of developing the Master Qualification Test Guide (MQTG) are addressed in the discussion on §60.15. No additional time or costs are involved.



- (b) The time and costs of completing the quarterly objective tests and performance demonstrations are addressed in the discussion on §60.15. No additional time or costs are involved.
- (c) The time and costs of completing the recurrent evaluations are addressed in the discussion on §60.19. No additional time or costs are involved.
- (d) The time and costs of obtaining comments in accordance with §60.9(b)(1) are addressed in the discussion on §60.9.
- (e) The time and costs of recording discrepancies are addressed in the discussions on §60.20. No additional time or costs are involved.
- (f) The time and costs of recording modifications to the FSTD are addressed in the discussion on §60.23. No additional time or costs are involved.

The total annualized cost for the respondents due to the 73,511 hours of information collection burden is estimated at \$3,268,998.48. This estimation has been calculated as follows:

Employee	Hourly Wage Rate <sup>1</sup>	Total Annual Hours <sup>2</sup>	Annual Cost
Management Representative	\$73.74	5,236	\$386,102.64
Clerk	\$29.70	889	\$26,403.30
Simulator Technician	\$42.39	67,386	\$2,856,492.54
Total annual cost to respondents:			\$3,268,998.48

The total estimated annual burden on the public is **73,511 hours**. This is calculated by summing all of the one-time and annual information collection burden in the preceding sections. Note that the one-time information collection burden of 1,424 hours in § 60.16 was divided by three to reflect the annual burden of the 2016 part 60 rulemaking which has a three year compliance period.

We approximate that the FAA will receive a total of 16 to 17 requests for evaluation from each of the 67 Flight Simulation Device Operators (FSTD) per year. There are also additional discrete responses for documentation and recordkeeping, including discrepancy log entries, QMS independent feedback, and preflight inspection documentation, for an estimated total of **814,850 responses**. The total number of hours (73,511) divided by the total number of responses (814,850) is 0.0902 hours (**5.41 minutes**) per response.

Pertinent Regulatory Requirement	Actual Number of Discrete Responses	Burden Hours

<sup>1</sup> See page 25 for wage rate data sources.

<sup>2</sup> Detailed hourly breakdown between employee wage categories is defined in Table 1 through Table 8 of this document.

60.5	41,549	4,648
60.9	0	0
60.13	0	0
60.15	12,460	813
60.16	758	620
60.19	759,863	67,386
60.20	0	0
60.23	0	0
60.25	220	44
60.31	0	0
Total	814,850	73,511

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

There are no additional capital, startup, or operational costs for this information collection that are not already described in the previous section. The information collection and reporting requirements in this rule can be conducted through customary and usual business practices. All of the mechanisms and processes that the FSTD sponsors need to collect this information are already in place and have been required since the original publication of part 60 in 2008.

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

The estimates for hours and costs are broken down by sections of the rule below. For a cumulative estimate of the hours, see the summary table at the end of this statement.

**§ 60.5 Quality Management System.**

The burden estimate to the government associated with this section is limited to the review/approval of QMS policies, processes, and procedures as well as the evaluation of the sponsor’s QMS program on-site. The following is the breakdown by initial versus continuing costs.

Initial Cost (New FSTD Sponsors seeking initial approval)

Review/Approval

A program analyst will spend 10 hours reviewing policies, processes and procedures on an estimated 3 new small sponsors annually, totaling 30 hours. At \$65.96/hour, the one-time cost to the Federal Government is \$1,979.

On-site Assessment

A program analyst will spend 14 hours assessing 3 new small sponsor programs per year. This is a total of 42 hours. At \$65.96/hour, the one-time cost to the Federal Government is \$2,770.

The total one-time cost to the government for estimated new FSTD sponsors is \$4,749 annually.

#### Continuing Cost (Existing FSTD sponsors)

##### Review/Approval

Periodic updates will be made to existing sponsor QMS programs which require review/approval by the NSPM. A program analyst will spend 0.5 hours reviewing policies, processes and procedure updates for 44 separate small sponsors, 0.5 hours reviewing updates for 20 medium sponsors, and 1 hour reviewing updates for 3 large sponsor programs. This is a total of 35 hours. At \$65.96/hour, the annual cost to the Federal Government is \$2,309.

##### On-site Assessment

Assessment visits are conducted every two years. It is therefore assumed that 50% of the sponsors will be reviewed annually. An Aviation Inspector will spend 10 hours assessing 22 separate small sponsor program and a program analyst will spend 2 hours with processing the records/assessment report. An Aviation Inspector will spend 10 hours assessing 10 medium sponsor programs and a program analyst will spend 2 hours with processing the records/assessment report. An Aviation Inspector will spend 50 hours assessing 1.5 large sponsor programs and a program analyst will spend 10 hours with processing the records/assessment report. This is a total of 474 hours. At \$65.96/hour, the annual cost to the Federal Government is \$31,265.

**The total annual cost to the government for this section (§ 60.5) is \$38,323.**

#### **§ 60.15 Initial Qualification Requirements.**

The burden estimate to the government associated with this section is limited to the review, approval, and storage of electronic MQTGs (eMQTG). The following is the breakdown by initial versus continuing costs:

#### Initial Cost (Newly qualified FSTDs)

##### Review/Approval/Storage

An Aerospace Engineer will spend 1 hour reviewing/approving and a clerk 0.08 hours managing the storage of an average of 41.5 new eMQTGs per year for a total burden of 45.0 hours. At \$65.96/hour, the one-time cost to the Federal Government is \$2,968.20 annually.

#### Continuing Cost (Updates to qualified FSTDs)

##### Review/Approval/Storage

An Aerospace Engineer will spend 0.5 hours reviewing/approving and a clerk 0.08 hours managing the storage of approximately 100 eMQTGs changes each year for a total burden of 57 hours. At \$65.96/hour, the annual cost to the Federal Government is \$3,759.72.

**The total annual cost to the government for this section (§ 60.15) is \$6,727.92.**

#### **§ 60.16 Additional Qualifications for a Currently Qualified FSTD.**

The burden to the government associated with this section is an annual estimated cost only for the review/approval of modifications to the FSTD in order to accommodate additional qualifications.

### Routine Modifications (Annual Estimate)

An Engineer/Pilot will spend 0.5 hours reviewing notifications of change on 200 FSTDs each year. A clerk will spend 0.1 hours preparing and mailing a letter to the sponsor in reply to those requests. The total estimate of effort is 120 hours [200 x (0.5+0.1)]. Additionally, 80 FSTDs are expected to require an evaluation based on the level of change/modification requested. It will take an Aviation Inspector approximately 0.5 hours to document that evaluation for a total of 40 hours. The total burden estimate for this section is 160 hours. At \$65.96/hour for an engineer/pilot and \$35.64/hour for a clerk, the annual cost to the Federal Government is \$9,947.

### One-Time Modifications Due to FSTD Directive #2 (2016 rulemaking, RIN 2120-AK08)

In addition to the estimated annual burden, FSTD Directive #2 will require up to 1675 FSTD one-time modification notifications to review over the three-year compliance period (March 2016 to March 2019). Since compliance with the Directive may not require a dedicated on-site FSTD evaluation (will be combined with or will replace an already scheduled continuing qualification evaluation), no additional evaluation documentation will be necessary. Details on this burden are also presented in question 15. The total estimated burden for the FSTD Directive is 1005 hours [1675 x (0.5+0.1)]. At \$65.96/hour for the engineer/pilot and \$35.64 for a clerk, the one-time cost to the Federal Government is \$61,211 (\$20,404 annually over the three year compliance period).

**The total annual cost to the government for this section (§ 60.16) is \$30,351.**

### **§ 60.19 Inspection, Maintenance, and Recurrent Evaluation Requirements.**

The estimate to the government associated with this section is limited to continuing/annual cost only. Costs are related to the time it takes to review sponsor completed objective testing and the time related to reporting the results of continuing evaluations. The following is a breakdown by each component.

#### Objective Testing Review

An Aviation Inspector will spend 0.1 hours reviewing each of approximately 33% of all tests performed annually by the sponsor. The number of these tests will vary by level of device. The total burden estimate for this section is calculated at 3,164.1 hours. At \$65.96/hour for an FAA FSTD Inspector the annual recurring cost to the Federal Government is \$208,704.

Part of these costs may be attributed to the change in the part 60 rule resulting in the issuance of the FSTD Directive 2. The burden attributed specifically to these changes is discussed below in question 15.

#### Continuing Evaluations

A Program Manager will spend 0.1 hours reviewing requests for evaluations and drafting a reply. An Aviation Inspector will spend 0.5 hours preparing an evaluation report and 0.1 hours reviewing three additional objective tests, picked at random, during the evaluation. The time burden for this section is calculated at 798.3 hours. At \$65.96/hours the total annual cost to the Government is \$52,656.

**The total annual cost to the Government for this section (§ 60.19) is \$261,360.**

**§ 60.25 Operation with Missing, Malfunctioning, or Inoperative Components.**

The burden estimate to the government associated with this section is limited to continuing cost only. Costs are related to the time it takes to review a sponsor's MMI extension/report, enter it into a tracking/history database, and to clear the report once the MMI is corrected/repared. It will take a clerk 0.1 hours to enter the report and 0.1 hours to clear once corrected. It will take an Aviation Inspector 0.1 hours to review. The total time burden for this section is calculated at 66 hours annually. At \$65.96/hour for an Aviation Inspector and \$35.64 for a clerk, the total annual cost to the Government is \$3,019.

**The total annual cost to the Federal Government for initial and continuing collection processing procedures is \$339,781.**

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

There is an increase to the level of effort estimated for sponsors and the Government in both one-time costs and continuing costs. These changes are made primarily to address the documentation and reporting of FSTD modifications required in FSTD Directive #2. Specific changes and adjustments are discussed section by section below.

60.5. Changes were made to update the current number of FSTD sponsors and qualified FSTDs. Additional changes were made to remove the one-time information collection burden for new FSTD sponsors who have already done so and to also estimate the number of new FSTD sponsors per year which will require a one-time information collection to report compliance.

60.9. No differences

60.13. No differences

60.15. Changes were made to remove the one-time information collection burden for FSTD sponsors who have already submitted electronic MQTGs on existing FSTDs and have this reflect the estimated number of newly qualified FSTDs per year which will require an eMQTG submission. The recurring information collection burden was also updated to reflect the current inventory of qualified FSTDs.

60.16. There is a slight increase in the information collection burden for both the sponsor and the Government. This section was modified to include (but not exclusively) the information collection burden of reporting FSTD modifications required for compliance with FSTD Directive #2. This is a one-time reporting event that is expected to be distributed annually over the three year compliance period of FSTD Directive #2 (2016 to 2019). See Attachment A for the breakdown and summary of these incremental changes due to the 2016 rulemaking.

60.19. There is a slight increase in the information collection burden for both the sponsor and the Government. Because the additional objective testing requirements of the 2016 changes to the part 60 QPS appendices and FSTD Directive #2 may require up to four additional objective tests

to be reviewed and documented on an annual basis, the average number of required objective tests for Level C and Level D FSTDs was revised upward by four tests. No changes were made to this section as a result of public comment on the NPRM. Estimates of the increase in paperwork attributed to the 2016 revision to the part 60 rule are presented separately in the sections above. See Attachment A for the breakdown and summary of these incremental changes due to the 2016 rulemaking.

The recurring information collection burden was also updated to reflect the current inventory of qualified FSTDs.

60.20. No differences

60.23. No differences

60.25. No differences

60.31. No differences

In this supporting statement, we have also accounted for the discrete responses for documentation and recordkeeping, including discrepancy log entries, QMS independent feedback, and preflight inspection documentation, when calculating the average time per response. The total number of hours (73,511) divided by the total number of responses (814,850) is 0.0902 hours **(5.41 minutes) per response.**

<b>Pertinent Regulatory Requirement</b>	<b>Actual Number of Discrete Responses</b>	<b>Burden Hours</b>
60.5	41,549	4,648
60.9	0	0
60.13	0	0
60.15	12,460	813
60.16	758	620
60.19	759,863	67,386
60.20	0	0
60.23	0	0
60.25	220	44
60.31	0	0
Total	814,850	73,511

**16. For collections of information whose results are planned to 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 no plan for tabulation or publication.

**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.**

No such approval is being sought.

**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.

**SUPPORTING STATEMENT**  
**OMB -2120-0680**

**Table 1, Cost In Hours for §60.5 (One-Time Cost – New Sponsors)**

	Small Sponsors	Medium Sponsors	Large Sponsors	Total Hours
<b>Private Sector:</b>				
<b>Document Policies, Processes, Procedures</b>				
Management Rep hours per Sponsor	56	112	720	--
Number of New Sponsors	3	0	0	--
Time for Each Type of Sponsor	168	0	0	168
<b>Initial On-Site Assessment</b>				
Management Rep hours per Sponsor	12	12	60	--
Number of New Sponsors	3	0	0	--
Time for Each Type of Sponsor	36	0	0	36
<b>Government:</b>				
<b>Review/Document/Report Results of Program</b>				
Program Analyst hours to review/approve	10	14	240	--
Number of New Sponsors	3	0	0	--
Total Time for Each Type of Sponsor	30	0	0	30
<b>Initial On-Site Assessment</b>				
Program Analyst hours to audit/document	14	14	70	--
Number of New Sponsors	3	0	0	--
Total Time for Each Type of Sponsor	42	0	0	42



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**Table 2, Cost In Hours for §60.5 (Recurring Cost – Existing Sponsors)**

	Small Sponsors	Medium Sponsors	Large Sponsors	Total Hours
<b>Private Sector:</b>				
<b>Policy, Process, Procedure Changes</b>				
Management Rep hours per Sponsor	0.5	0.5	1	--
Number of Sponsors	44	20	3	--
Time for Each Type of Sponsor	22	10	3	35
<b>Self-Assessments</b>				
Management Rep hours per Sponsor	3	6	39	--
Number of Sponsors	44	20	3	--
Time for Each Type of Sponsor	132	120	117	369
<b>Continuing On-Site Assessment</b>				
Management Rep hours per Sponsor	12	12	60	--
Number of Sponsors	22	10	1.5	--
Time for Each Type of Sponsor	264	120	90	474
<b>Independent Feedback</b>				
Responses/Feedback items per year	360	720	3600	--
Management Rep hours per Sponsor	0.08	0.08	0.08	--
Number of Sponsors	44	20	3	--
Time for Each Type of Sponsor	1320	1200	900	3420
<b>Identify Management Representative</b>				
Hours to notify NSPM of MR change	0.08	0.08	0.08	--
Number of changes per year	1	1	1	--
Number of Sponsors	44	20	3	--
Time for Each Type of Sponsor	3.7	1.7	0.3	5.6
<b>Regular Briefings to Sponsor Management</b>				
Hours to brief	0.5	0.5	1	--
Number of briefings per year	4	4	4	--
Number of Sponsors	44	20	3	--
Time for Each Type of Sponsor	88	40	12	140

**SUPPORTING STATEMENT**  
**OMB -2120-0680**

**Table 2, Cost In Hours for §60.5 (Recurring Cost) - Continuing**

	Small Sponsors	Medium Sponsors	Large Sponsors	Total Hours
<b>Government:</b>				
<b>Policy, Process, Procedure Changes</b>				
Program Analyst hours to review/approve	0.5	0.5	1	--
Number of Sponsors	44	20	3	--
Time for Each Type of Sponsor	22	10	3	35
<b>Continuing On-Site Assessment</b>				
Program Analyst hours to audit/document	2	2	10	--
Aviation Inspector hours to audit/document	10	10	50	--
Number of Sponsors	22	10	1.5	--
Time for Each Type of Sponsor	264	120	90	474

**Table 3, Cost In Hours for §60.15 (One-Time Cost – New Initial Qualifications per Year)**

	<u>Level 5</u>	<u>Level 6</u>	<u>Level 7</u>	<u>Level A</u>	<u>Level B</u>	<u>Level C</u>	<u>Level D</u>	<u>Total Hours</u>
<b>Private Sector:</b>								
<b>Convert MQTG to Electronic Format</b>								
Clerk hours to convert each page of MQTG	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--
Number of pages to convert	500	1000	2000	1000	1000	1500	2000	--
Number of new FSTDs per year (est.)	5	1.5	1	0	0	2.5	31.5	--
Time for Each Type of Device	20.8	12.5	16.7	0	0	31.3	525.0	606.3
<b>Government:</b>								
<b>Review/Storage of MQTG</b>								
Aerospace Engineer hours to review	1	1	1	1	1	1	1	--
Clerk hours to store	0.08	0.08	0.08	0.08	0.08	0.08	0.08	--
Number of current FSTDs	5	1.5	1	0	0	2.5	31.5	--
Time for Each Type of Device	5.4	1.6	1.1	0	0	2.7	34.1	45.0

**SUPPORTING STATEMENT**

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**Table 4, Cost In Hours for §60.15 (Recurring Cost – Changes to existing FSTDs)**

	<u>Level</u> <u>5</u>	<u>Level</u> <u>16</u>	<u>Level</u> <u>7</u>	<u>Level</u> <u>A</u>	<u>Level</u> <u>B</u>	<u>Level</u> <u>C</u>	<u>Level D</u>	<u>Total</u> <u>Hours</u>
<b>Private Sector:</b>								
<b>Convert MQTG to Electronic Format</b>								
<b>Clerk hours to convert each page of MQTG</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.01	--
<b>Changes to MQTG each year</b>	14	14	14	14	14	14	14	--
<b>Number of pages to convert</b>	2	2	2	2	2	2	2	--
<b>Number of current FSTDs</b>	72	48	10	3	9	114	631	--
<b>Time for Each Type of Device</b>	16.8	11.2	2.3	0.7	2.1	26.6	147.2	207.0
<b>Government:</b>								
<b>Review/Storage of MQTG</b>								
<b>Aerospace Engineer hours to review</b>	0.5	0.5	0.5	0.5	0.5	0.5	0.5	--
<b>Clerk hours to store</b>	0.08	0.08	0.08	0.08	0.08	0.08	0.08	--
<b>Changes to MQTG each year</b>	14	14	14	14	14	14	14	--
<b>Time for Each Type of Device</b>	8.2	8.2	8.2	8.2	8.2	8.2	8.2	57

**SUPPORTING STATEMENT**  
**OMB -2120-0680**

**Table 5, Cost In Hours for §60.16 (Recurring Cost)**

	<b><u>Total Hours</u></b>
<b>Private Sector:</b>	
<b>Additional Tasks / Modifications</b>	
Number of notifications per year	200
Management Rep hours to draft letter	0.5
Clerk hours to prepare / mail letter	0.1
Number of additional tasks/mods that require MQTG change	100
Management rep hours to make / insert MQTG change	0.25
Time for Each Sponsor	145
<b>Government:</b>	
<b>Additional Tasks / Modifications</b>	
Number of notifications per year	200
Aerospace Engineer hours to review	0.5
Clerk hours to prepare / mail response	0.1
Number of additional tasks/mods requiring evaluation	80
Aviation Inspector hours to draft/present report	0.5
Time for Each Sponsor	160

**Table 6, Cost In Hours for §60.16 (FSTD Directive #2 - One Time Cost)**

	<b><u>Total Hours</u></b>	
<b>Private Sector:</b>		
<b>Additional Tasks / Modifications</b>		
Number of notifications	1675	
Management Rep hours to draft letter	0.5	
Clerk hours to prepare / mail letter	0.1	
Number of additional tasks/mods that require MQTG change	1675	
Management rep hours to make / insert MQTG change	0.25	
Time for Each Sponsor	1424	
<b>Government:</b>		
<b>Additional Tasks / Modifications</b>		
Number of notifications per year	1675	
Aerospace Engineer hours to review	0.5	
Clerk hours to prepare / mail response	0.1	
Number of additional tasks/mods requiring evaluation	0	
Aviation Inspector hours to draft/present report	0	
Time for Each Sponsor	1005	

**SUPPORTING STATEMENT**  
**OMB -2120-0680**

**Table 7, Cost In Hours for §60.19 (Recurring Cost)**

	<u>Level 5</u>	<u>Level 6</u>	<u>Level 7</u>	<u>Level A</u>	<u>Level B</u>	<u>Level C</u>	<u>Level D</u>	<u>Total Hours</u>
<b>Private Sector:</b>								
<b>Objective Testing</b>								
Number of FSTDs	72	48	10	3	9	114	631	--
Number of tests conducted	20	28	46	58	78	100	127	--
Simulator Tech hours per test	0.1	0.1	0.1	0.1	0.1	0.1	0.1	--
Time for Each Type of Device	144	134	46	17	70	1149	8014	9566
<b>Functional Pre-Flight</b>								
Number of FSTDs	72	48	10	3	9	114	631	--
FSTD usage (5 days x 52 wks)	260	260	260	260	260	260	260	--
Number of pre-flights conducted (FSTD # x usage)	18720	12480	2600	780	2340	29640	164060	--
Simulator Tech hours to document each pre-flight	0.1	0.1	0.1	0.1	0.1	0.1	0.1	--
Time for Each Type of Device	1872	1248	260	78	234	2964	16406	23062
<b>Continuing Evaluations</b>								
Number of FSTDs	72	48	10	3	9	114	631	--
Management Rep hours to draft/send eval request	0.1	0.1	0.1	0.1	0.1	0.1	0.1	--
Simulator tech hrs to print/present additional tests	0.1	0.1	0.1	0.1	0.1	0.1	0.1	--
Number of additional tests run during evaluation	3	3	3	3	3	3	3	--
Time for Each Type of Device	29	19	4	1	4	46	252	355
<b>Maintain a Discrepancy Log</b>								
Number of FSTDs	72	48	10	3	9	114	631	--
Number of discrepancies per week per FSTD	5	5	10	10	10	10	10	--
Simulator Tech hrs to record/update each	0.08	0.08	0.08	0.08	0.08	0.08	0.08	--
Time for Each Type of Device	1498	998	416	125	374	4742	26250	34403

**SUPPORTING STATEMENT**  
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**Table 7, Cost In Hours for §60.19 (Recurring Cost) - Continuing**

	<u>Level</u> <b>5</b>	<u>Level</u> <b>6</b>	<u>Level</u> <b>7</b>	<u>Level</u> <b>1A</b>	<u>Level</u> <b>B</b>	<u>Level</u> <b>C</b>	<b>Level D</b>	<b>Total Hours</b>
<b>Government:</b>								
<b>Objective Testing</b>								
<b>Number of FSTDs</b>	72	48	10	3	9	114	631	--
<b>Number of tests reviewed</b>	7	9	15	19	26	33	42	--
<b>Aviation Inspector hours to review each test</b>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	--
<b>Time for Each Type of Device</b>	50.4	43.2	15.0	5.7	23.4	376.2	2650.2	3164.1
<b>Continuing Evaluations</b>								
<b>Number of FSTDs</b>	72	48	10	3	9	114	631	--
<b>Program Manager hours to draft/send eval request reply</b>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	--
<b>Aviation Inspector hrs to draft/present report</b>	0.5	0.5	0.5	0.5	0.5	0.5	0.5	--
<b>Number of additional tests run during evaluation</b>	3	3	3	3	3	3	3	--
<b>Aviation Inspector hrs to review each additional test</b>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	--
<b>Time for Each Type of Device</b>	64.8	43.2	9	2.7	8.1	102.6	567.9	798.3

**SUPPORTING STATEMENT**  
**OMB -2120-0680**

**Table 8, Cost In Hours for §60.25 (Recurring Cost)**

	<b><u>Total Hours</u></b>
<b>Private Sector:</b>	
<b>MMI Reporting</b>	
Number of MMIs reported per year	220
Management Rep hours to document and report	0.1
Management rep hours to update and/or clear	0.1
Time for Each Sponsor	44
<b>Government:</b>	
<b>MMI Reporting</b>	
Number of MMIs reported per year	220
Clerk hours to enter into database and file report	0.1
Aviation Inspector hours to review	0.1
Clerk hours to enter clearance into database and file report	0.1
Time for Each Sponsor	66

**Summary  
Paperwork Reduction  
Annualized Cost to the Sponsor and the Government  
(Presented in Hours)**

Relevant Section of Part 60	Initial Cost in Hours (Annualized)						Annual Recurring Cost in Hours					
	To Sponsors			To Government			To Sponsors			To Government		
	2012	Now	Change	2012	Now	Change	2012	Now	Change	2012	Now	Change
§60.5	6,536	204	-6,332	2,288	72	-2,216	3,573	4,444	871	397	509	112
§60.9 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	0
§60.13 <sup>2</sup>	0	0	0	0	0	0	0	0	0	0	0	0
§60.15 <sup>3</sup>	8,329	606	-7,723	616	45	-571	135	207	72	58	57	-1
§60.16 <sup>4,5</sup>	145	475	330	160	335	175	0	145	145	0	160	160
§60.19 <sup>6,7</sup>	<del>-----Not Applicable-----</del>						58,084	67,386	9,302	3,268	3,962	694
§60.20 <sup>8</sup>	<del>-----Not Applicable-----</del>						0	0	0	0	0	0
§60.23	<del>-----Not Applicable-----</del>						0	0	0	0	0	0
§60.25	<del>-----Not Applicable-----</del>						44	44	0	66	66	0
§60.31	0	0	0	0	0	0	0	0	0	0	0	0
<b>Totals</b>	<b>15,010</b>	<b>1,285</b>	<b>-13,725</b>	<b>3,064</b>	<b>452</b>	<b>-2,612</b>	<b>61,836</b>	<b>72,226</b>	<b>10,390</b>	<b>3,789</b>	<b>4,754</b>	<b>965</b>

- 1 Calculations are included within the calculations for §60.5.
- 2 Calculations are included within the calculations for §60.15 and §60.16.
- 3 Calculations based on current active FSTDs and estimated new FSTDs per year.
- 4 Reallocated estimated number of annual notifications into annual recurring costs
- 5 Added one-time initial cost of reporting compliance on FSTD Directive training tasks (annualized across the 3 year compliance period)
- 6 Updated erroneous number of FSTDs per qualification level
- 7 Added an average of 4 additional objective test cases (for Level C and D simulators) to comply with FSTD Directive #2
- 8 Calculations are included within the calculations for §60.19.





**Attachment A**  
**Incremental Changes as a Result of the 2016 Part 60 Final Rule (Flight Simulation Training Device Qualification Standards for Extended Envelope and Adverse Weather Event Training Tasks Final Rule), RIN 2120-AK08**

Note: In a 2016 final rule, changes were made to the existing part 60 rule to require FSTD modifications and evaluations in order to receive qualification to conduct extended envelope training (upset prevention and recovery training, full stall training, etc.) in pilot training programs. This rule change introduces a one-time information collection burden for FSTD sponsors to report compliance to the new rule requirements. It also slightly increases the annual information collection burden for existing FSTDs. All additional information collection burden described in this section has already been integrated into the previous existing sections. The following information provides a breakdown of these incremental changes as a result of the 2016 part 60 rulemaking

**Change in Paperwork Burden due to reporting compliance with FSTD Directive #2 (60.16, 60.23, and Appendix A, Attachment 6)**

The following estimates of the cost burden of the amendments to the part 60 rule use the following estimated wage rates.

<b>Private Sector</b>			
	<b>Hourly wage</b>	<b>Benefit</b>	<b>Total</b>
Management Representative (1)(2)	\$51.84	\$21.90	\$73.74
Clerk (1) (3)	\$20.88	\$8.82	\$29.70
Simulator Technician (4)	\$29.80	\$12.59	\$42.39
<b>Government</b>			
Federal GS14-1 (Atlanta) (5) jobs not clerk	\$48.41	\$17.55	\$65.96
Federal GS10-1 (Atlanta) (5) [clerk]	\$26.16	\$9.48	\$35.64
		<b>Benefit factor</b>	
Benefit factor Private (6)(8)		29.7%	
Fringe Benefit Factor Federal (7)(9)		36.25%	

(1) [http://www.bls.gov/oes/current/naics4\\_336400.htm#11-0000](http://www.bls.gov/oes/current/naics4_336400.htm#11-0000)

(2) Administrative Services Manager, Occupation code - 11-3011

(3) Information and Record Clerk, Occupation code - 43-4000

- (4) <http://www.bls.gov/oes/current/oes173021.htm>, Aerospace Engineering and Operations Technicians, Occupation code - 17-3021  
 (5) <http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2012/general-schedule/atlanta-sandy-springs-gainesville-ga-al-hourlyovertime-rates-by-grade-and-step/>  
 (6) <http://www.bls.gov/news.release/pdf/ecec.pdf>  
 (7) <http://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2008/m08-13.pdf>  
 (8) Percent of total compensation.  
 (9) Percent of position's basic pay.

<b>Private Sector</b>			
	<b>Hourly wage</b>	<b>Benefit</b>	<b>Total</b>
Management Representative (1)(2)	\$51.84	\$21.90	\$73.74
Clerk (1) (3)	\$20.88	\$8.82	\$29.70
Simulator Technician (4)	\$29.80	\$12.59	\$42.39
<b>Government</b>			
Federal GS14-1 (Atlanta) (5) jobs not clerk	\$48.41	\$17.55	\$65.96
Federal GS10-1 (Atlanta) (5) [clerk]	\$26.16	\$9.48	\$35.64
		<b>Benefit factor</b>	
Benefit factor Private (6)(8)		29.7%	
Fringe Benefit Factor Federal (7)(9)		36.25%	
(1) <a href="http://www.bls.gov/oes/current/naics4_336400.htm#11-0000">http://www.bls.gov/oes/current/naics4_336400.htm#11-0000</a>			
(2) Administrative Services Manager, Occupation code - 11-3011			
(3) Information and Record Clerk, Occupation code - 43-4000			
(4) <a href="http://www.bls.gov/oes/current/oes173021.htm">http://www.bls.gov/oes/current/oes173021.htm</a> , Aerospace Engineering and Operations Technicians, Occupation code - 17-3021			
(5) <a href="http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2012/general-schedule/atlanta-sandy-springs-gainesville-ga-al-hourlyovertime-rates-by-grade-and-step/">http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2012/general-schedule/atlanta-sandy-springs-gainesville-ga-al-hourlyovertime-rates-by-grade-and-step/</a>			
(6) <a href="http://www.bls.gov/news.release/pdf/ecec.pdf">http://www.bls.gov/news.release/pdf/ecec.pdf</a>			
(7) <a href="http://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2008/m08-13.pdf">http://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2008/m08-13.pdf</a>			
(8) Percent of total compensation.			
(9) Percent of position's basic pay.			

## Private sector burden

The paragraphs immediately below describe the increase in paperwork burden specifically associated with the 2016 Flight Simulation Training Device Qualification Standards for Extended Envelope and Adverse Weather Event Training Tasks final rule (14 CFR 60).

In the 2016 Part 60 final rule, FSTD Directive #2 was introduced which requires Sponsors of previously qualified FSTDs to evaluate and modify FSTDs in order to qualify an FSTD to be used to conduct full stall, upset recovery, icing, gusting crosswind, and bounced landing recovery training. In the final rule, a compliance period of three years was required to conduct these modifications after the publication of the final rule in March 2016. The reporting of compliance for each of the five training tasks under the Directive had a one-time information collection burden as described in § 60.16 and § 60.23. The training tasks described above are only required of air carriers, so it is expected that only Sponsors of Level C and Level D FSTDs

used for air carrier training will report such modifications to comply with the FSTD Directive (referred to as a notification). At the time of the proposal, an estimated 322 previously qualified FSTDs might have required modification in accordance with the Directive. This number has been slightly increased to 335 FSTDs since the NPRM was published and is reflected in the following calculations for the final rule. Because compliance may be reported separately for each of the five training tasks, it is estimated that up to 1675 individual (335 x 5 = 1675) notifications may be required over the three year compliance period, resulting in an average of 558 additional notifications per year. Each modification under the FSTD Directive requires an amendment to the MQTG. Each amendment requires a management representative to spend 0.5 hours in drafting a letter to the NSPM and a clerk to spend .1 hour preparing the letter for mailing. In addition, the management representative will spend .25 on additional tasks that require qualification test guide modifications for each notification. This additional one-time information collection burden will be approximately 1,424 hours distributed over the three year compliance period [335 \* 5 \* 0.85].

		Hours per			
<b>60.16 Private Sector Burden</b>		<b>notification</b>	<b>Hours</b>	<b>Hourly Rate</b>	<b>Cost</b>
Additional Tasks/Modifications					
Number of notifications	1675				
Management Rep hours to draft letter		0.5	838	\$73.74	\$61,794
Management Rep hours to make/insert MQTG change		0.25	419	\$73.74	\$30,897
Clerk hours to prepare/mail letter		0.1	168	\$29.70	\$4,990
Total			1425		\$97,681

**Federal Burden**

**Change in Paperwork Burden due to documentation of compliance with FSTD Directive #2 (60.16, 60.23, and Appendix A, Attachment 6)**

The paragraphs immediately below describe the increase in paperwork burden to the federal government specifically associated with the 2016 Flight Simulation Training Device Qualification Standards for Extended Envelope and Adverse Weather Event Training Tasks final rule (14 CFR 60).

In the 2016 final rule to update Part 60, FSTD Directive #2 was introduced that requires Sponsors of previously qualified FSTDs to evaluate and modify FSTDs in order to qualify an FSTD to be used to conduct full stall, upset recovery, icing, gusting crosswind, and bounced landing recovery training. The government will have to review the resulting 1675 FSTD one-time notifications over the three year compliance period. Since the Directive will not require a dedicated on-site FSTD evaluation (would be combined with an already scheduled continuing qualification evaluation), no additional evaluation documentation would be necessary. An Engineer/Pilot will spend 0.5 hours reviewing notifications of change and a clerk will spend .1 hour preparing and mailing a letter to the sponsor in reply to these requests. The total estimated burden for the FSTD Directive is 1005 hours [1675 x (0.5+0.1)]. At a burdened rate of \$65.96 an hour for the engineer/pilot <sup>3</sup> and a burdened rate of \$35.64 an hour for the clerk, the one-time cost to the Federal Government will be \$61,262 (\$20,421 annually over the three year clearance period).

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<sup>3</sup> Equivalent GS is assumed to be GS 14 step one.



<b>60.16 Federal Burden</b>		<b>Hours per notification</b>	<b>Hours</b>	<b>Hourly Rate</b>	<b>Cost</b>
Number of Notifications Engineer/Pilot (equivalent of GS14 Step 1)	1675	0.5	838	\$65.96	\$55,274
Clerk (equivalent of GS10 Step 1)		0.1	168	\$35.64	\$5,988
<b>Total</b>			1006		<b>\$61,262</b>

<b>60.16 Federal Burden</b>		<b>Hours per notification</b>	<b>Hours</b>	<b>Hourly Rate</b>	<b>Cost</b>
Number of Notifications Engineer/Pilot (equivalent of GS14 Step 1)	1675	0.5	838	\$65.96	\$55,242
Clerk (equivalent of GS10 Step 1)		0.1	168	\$35.64	\$5,970
<b>Total</b>			1006		<b>\$61,212</b>

**Change in Paperwork Burden due to additional continuing inspection requirements of the FSTD Directive #2 (60.19 and Appendix A, Attachment 6)**

The paragraphs immediately below describe the increase in paperwork burden specifically associated with the 2016 Flight Simulation Training Device Qualification Standards for Extended Envelope and Adverse Weather Event Training Tasks (14 CFR 60) final rule. The cost estimates use the wage rates presented in question 60.16 above.

**Private Sector Burden**

Because the number of objective tests required to maintain FSTD qualification will increase slightly with this final rule, the annual information collection burden will also increase under the FSTD inspection and maintenance requirements of § 60.19. This additional information collection burden is estimated by increasing the average number of required objective tests for all Level C and Level D FSTDs by four tests<sup>4</sup>. For the estimated 335 FSTDs that may be affected by the FSTD Directive, this will result in an additional 134 hours of annual information collection burden to FSTD Sponsors. This additional collection burden is based upon 0.1 hours<sup>5</sup> per test for a simulator technician to document as required by § 60.19.

For new Level C and Level D FSTDs qualified after the effective date of this rule, there would also be an increase of approximately four objective tests<sup>6</sup> required to maintain FSTD qualification under § 60.19. For the estimated 23 new Level C and Level D FSTDs that may be initially qualified on an annual basis, this will result in an additional 9 hours of annual information collection burden to FSTD Sponsors. Note that this increase in annual testing required by § 60.19 has been reflected in Table 7 by increasing the average number of objective tests for all Level C and Level D FSTDs by four tests.

	<b>Hours per notification</b>	<b>Hours</b>	<b>Hourly Rate</b>	<b>Cost</b>
<b>60.19 Private Sector Burden</b>				
Simulator technician	0.1	143	\$42.39	\$6,062
Total	0.1	143	\$42.39	\$6,062
Total Private Sector Burden due to the final part 60 rule		1568		\$103,743

<sup>4</sup> For previously qualified FSTDs, the requirements of FSTD Directive #2 will add a maximum of four additional objective test cases to the existing requirements.

<sup>5</sup> The 0.1 hour burden is derived from the existing Part 60 Paperwork Reduction Act supporting statement (OMB-2120-0680), Table 6 (§ 60.19) and includes estimated time for the FSTD Sponsor’s staff to document the completion of required annual objective testing.

<sup>6</sup> Comparison of the final rule QPS appendices with the current part 60 QPS appendices show that an average of four additional objective tests will be required. This is an average number because the actual number of tests may vary by FSTD.



		Hours per notification	Hours	Hourly Rate	Cost
<b>60.19 Private Sector Burden</b>					
Simulator technician		0.1	143	\$42.39	\$6,062
Total		0.1	143	\$42.39	\$6,062

## Federal Burden

The paragraphs immediately below describe the increase in paperwork burden to the federal government specifically associated with the 2016 Flight Simulation Training Device Qualification Standards for Extended Envelope and Adverse Weather Event Training Tasks (14 CFR 60) final rule.

Because the number of objective tests required to maintain FSTD qualification will increase slightly with the proposal, the annual information collection burden will also increase under the FSTD inspection and maintenance requirements of § 60.19. This additional information collection burden is estimated by increasing the average number of required objective tests for all Level C and Level D FSTDs by four tests<sup>7</sup>. The additional information collection burden to the Federal government will increase by approximately 45 hours<sup>8</sup> due to the additional tests that may be sampled and reviewed by the FAA during continuing qualification evaluations.

For new Level C and Level D FSTDs qualified after the effective date of this rule, there will also be an increase of approximately four objective tests<sup>9</sup> required to maintain FSTD qualification under § 60.19. For the estimated 23 new Level C and Level D FSTDs that may be initially qualified on an annual basis, this will result in an additional 3 hours of annual information collection burden to the Federal Government. Note that this increase in annual testing required by 60.19 has been reflected in Table 7 by increasing the average number of objective tests for all Level C and Level D FSTDs by one test (the FAA typically will spot check up to 33% of tests during a continuing qualification evaluation).

<sup>7</sup> For previously qualified FSTDs, the requirements of FSTD Directive #2 will add a maximum of four additional objective test cases to the existing requirements.

<sup>8</sup> This information collection burden is based upon 0.1 hours per test required for FAA personnel to review. These four additional tests are subject to the approximately 33% of which may be spot checked by FAA personnel on site during a continuing qualification evaluation.  $[335 \times 0.1 \times 4 \times 33\% = 45]$

<sup>9</sup> Comparison of the final rule QPS appendices with the current part 60 QPS appendices show that an average of four additional objective tests will be required. This is an average number because the actual number of tests may vary by FSTD.

	Hours per notification	Hours	Hourly Rate	Cost	
<b>60.19 Federal Burden</b> Federal Aviation Inspector Review		0.1	48	\$65.96	\$3,166
<b>Total</b>			48		\$3,166
<b>Total Federal Burden due to the final part 60 rule</b>			1054		\$64,428

		Hours per notification	Hours	Hourly Rate	Cost
<b>60.19 Federal Burden</b> Federal Aviation Inspector Review		0.1	48	\$65.96	\$3,166
<b>Total</b>			48		\$3,166

**Summary Paperwork Reduction Changes to Part 60 due to the Flight Simulation Training Device Qualification Standards for Extended Envelope and Adverse Weather Event Training Tasks Final Rule (2016)**

		<b>Hours per notification</b>	<b>Hours</b>	<b>Hourly Rate</b>	<b>Cost</b>
<b>60.16 Private Sector Burden</b>					
Additional Tasks/Modifications					
Number of notifications	1675				
Management Rep hours to draft letter		0.5	838	\$73.74	\$61,794
Management Rep hours to make/insert MQTG change		0.25	419	\$73.74	\$30,897
Clerk hours to prepare/mail letter		0.1	168	\$29.70	\$4,990
<b>Total</b>			1425		\$97,681
<b>60.19 Private Sector Burden</b>					
Simulator technician		0.1	143	\$42.39	\$6,062
<b>Total</b>		0.1	143	\$42.39	\$6,062
<b>Total Private Sector Burden due to Proposed part 60 rule</b>			1568		\$103,743

		<b>Hours per notification</b>	<b>Hours</b>	<b>Hourly Rate</b>	<b>Cost</b>
<b>60.16 Federal Burden</b>					
Number of Notifications	1675				
Engineer/Pilot (equivalent of GS14 Step 1)		0.5	838	\$65.96	\$55,242
Clerk (equivalent of GS10 Step 1)		0.1	168	\$35.64	\$5,970
<b>Total</b>			1006		<b>\$61,212</b>
<b>60.19 Federal Burden</b>					
Federal Aviation Inspector Review		0.1	48	\$65.96	\$3,166
<b>Total</b>			48		\$3,166
<b>Total Federal Burden due to Proposed part 60 rule</b>			1054		<b>\$ 64,378</b>