

# SUPPORTING STATEMENT

## OMB Control Number 2120-NEW

### TITLE 14, CODE OF FEDERAL REGULATIONS, PARTS 401, 413, 450: LAUNCH AND REENTRY LICENSING REQUIREMENTS

#### A. Justification<sup>1</sup>

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

51 U.S.C. Chapter 509 requires that the FAA oversee commercial space activities in the United States, or conducted by United States citizens abroad, to ensure they do not unduly jeopardize the public health and safety, safety of property, or national security or foreign policy interests of the United States. Generally speaking, Chapter 509 requires a license to launch or reenter a vehicle in the United States or for a U.S. citizen to launch or reenter a vehicle outside the United States. FAA regulations, including those proposed in 14 CFR part 450, would ensure launch and reentry operations are consistent with this statutory mandate.

The FAA proposed part 450 to consolidate and update licensing and operational requirements currently codified in parts 415, 417, 431, and 435. The FAA collected information for those parts pursuant to OMB Control Numbers 2120-0608 and 2120-0643. Consistent with this consolidation approach, the FAA now seeks to consolidate document collection under a single new OMB Control Number. To that end, the new OMB Control Number would document the FAA's collection of information pursuant to parts 413 and 450.

14 CFR parts 413 and 450 collectively identify information applicants must submit for a vehicle operator license. Part 413 (§ 413.7) sets the manner for submitting an application. Part 450 Subpart B (Requirements to obtain a vehicle operator license) sets the broad application requirements to obtain a vehicle operator license. For example, § 450.41 sets requirements for policy review, § 450.43 for payload review, § 450.45 covers safety, and § 450.47 addresses environmental requirements. Part 450 subpart C (Safety requirements) focuses on safety requirements, some of which must be satisfied by the time of application while others apply post-license. Applicants must therefore provide the FAA information showing regulatory compliance both as part of the application and after the FAA grants a license. Part 450 subpart D (Terms and conditions of a vehicle operator license) contains requirements for continuing accuracy of a license and application for modification of a license (§ 450.211), preflight reporting (§ 450.213), post-flight reporting (§ 450.215), and registration of space objects (§ 450.217.)

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<sup>1</sup> This supporting statement revises prior justification statements to encompass the regulatory changes contained in the Streamlined Launch and Reentry Licensing Requirements Notice of Proposed Rulemaking, which combines 14 CFR parts 415, 417, 431, and 435 into a single part (i.e., part 450). Hence, it presents total burden cost information that replaces prior estimates of the burden to industry and the Federal government associated with the collection of information supporting the vehicle operator license and renewal application process.

The FAA expects the information received under prior OMB Control Numbers 2120-0608 and 2120-0643 to be substantively similar to the information received under the new OMB control number.

**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 FAA's Office of Commercial Space Transportation (AST) uses the information to ensure commercial space activities in the United States, or conducted by United States citizens abroad, do not unduly jeopardize the public health and safety, safety of property, or national security or foreign policy interests of the United States. AST uses the data to assess the risk to public health and safety, and the safety of property. Risk must remain within the limits set in FAA regulations. AST shares other information with government partners (e.g., NASA, DOD, Department of State) during payload and policy reviews to ensure the proposed activities do not present unacceptable national security or foreign policy implications for the United States.

The FAA collects information before and after the issuance of a vehicle operator license. An applicant's license proposal is assessed in terms of significant policy issues affecting the national security, foreign policy interests, or international obligations of the United States. Information collected allows AST to make a preliminary assessment of a proposed launch or reentry prior to beginning general licensing application procedures. After favorable review by AST of an applicant's proposal in terms of policy implications, the applicant must demonstrate that it can safely launch, including with a payload if any, or reenter its vehicle. To this end, AST's safety evaluation process requires an applicant to submit information that includes a description of its system safety program, hazard control strategy, and mishap response plan. Also, operators must meet preflight and post-flight reporting requirements.

Additionally, Article IV of the 1975 Convention on Registration of Objects Launched Into Outer Space (Registration of Space Objects), to which the United States is a signatory, requires details about the orbit of each space object. To meet this obligation, the FAA requires operators to register with AST the name and mission of any payload.

Further, according to the requirements of the National Environmental Policies Act, 42 U.S.C. § 4321, et. seq., (NEPA), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA, 40 CFR Parts 1500-1508, and the DOT's Procedures for Considering Environmental Impacts, (that is, DOT Order 5610.1C), applicants must submit environmental information to AST. This includes information concerning proposed new launch or reentry sites and launch or reentry vehicles not currently described in the environmental impact statements, as well as payloads that may have significant environmental impacts if a launch or reentry accident occurs.

**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.**

The FAA collects most of its information electronically, mainly through electronic mail.

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

The FAA works with other government partners and regulated entities to identify areas of duplication. To the extent areas are identified and in order to decrease industry burden, the FAA encourages regulated entities to submit the previously submitted documentation to the FAA in its original format. In general, an applicant can submit information in any format. Unique information routinely constitutes a small portion of the data collected. Furthermore, instead of resubmitting a document to the FAA, the FAA allows a regulated entity to reference previously-submitted materials (highlighting any changes).

**5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden on small businesses or other small entities.**

Pursuant to the Regulatory Flexibility Act of 1980 (RFA), FAA found that regulations establishing this collection will not have a significant economic impact on a substantial number of small entities. The regulations establishing this collection are written to allow flexibility and innovation.<sup>2</sup>

**6. Describe the consequence to Federal programs 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 FAA were not to collect this information, it would not be able to meet its statutory obligation to ensure commercial space activities safeguard public health and safety, safety of property, national security or foreign policy interests of the United States.

**7. Explain any special circumstances that would cause the requirement to be inconsistent with guidelines 5 CFR 1320.5(d)(2)(i)-(viii).**

No special circumstances exist preventing consistency with the guidelines in 5 CFR 1320.5(d)(2)(i)-(viii).

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<sup>2</sup> In addition, the Streamlined Launch and Reentry Licensing Requirements rulemaking consolidates and revises multiple regulatory parts to apply a single set of streamlined licensing regulations across several types of operations and vehicles. It replaces many prescriptive licensing application requirements with performance-based requirements, giving industry—including small entities—greater flexibility and scalability that may reduce future burden and costs.

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

A notice was published in the Federal Register on May 9, 2019 (84 FR 20461) that requested comments on this Paperwork Reduction Act (PRA) collection of information by July 8, 2019.

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

No decision was made to provide payments or special compensation to respondents.

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

14 CFR § 413.9 Confidentiality, provides that:

*(a) Any person furnishing information or data to the FAA may request in writing that trade secrets or proprietary commercial or financial data be treated as confidential. The request must be made at the time the information or data is submitted, and state the period of time for which confidential treatment is desired.*

*(b) Information or data for which any person or agency requests confidentiality must be clearly marked with an identifying legend, such as "Proprietary Information," "Proprietary Commercial Information," "Trade Secret," or "Confidential Treatment Requested." Where this marking proves impracticable, a cover sheet containing the identifying legend must be securely attached to the compilation of information or data for which confidential treatment is requested.*

*(c) If a person requests that previously submitted information or data be treated confidentially, the FAA will do so to the extent practicable in light of any prior distribution of the information or data.*

*(d) Information or data for which confidential treatment has been requested or information or data that qualifies for exemption under section 552(b)(4) of Title 5, United States Code, will not be disclosed to the public unless the Associate Administrator determines that the withholding of the information or data is contrary to the public or national interest.*

**11. Provide additional justification for any questions of a sensitive nature.**

No sensitive information is required.

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

The FAA provides estimates of hour burden and costs to industry in this section and provides estimates of hour burden and costs to the Federal Government (FAA) in item 14 below. Cumulative industry and FAA hour burden and costs are summarized at the end of both items 12 and 14.

The burden to industry for collecting information to comply with 14 CFR parts 413 and 450 to obtain, maintain, and renew a vehicle operator license involves several principal activities. These activities include pre-application consultation with AST, preparation of the application, and resolution of questions associated with the application. The application process has been streamlined to consolidate separate types of launch and reentry licenses into a single vehicle operator license. In addition, under the streamlined application process, an applicant, according to § 450.33, may submit its application in increments and the FAA may make incremental determinations.

The FAA estimates that the hour burden to industry for the collection of information necessary to comply with 14 CFR parts 413 and 450 in order to complete and submit an application for a vehicle operator license can be as many as 2,903 hours. Further, the FAA estimates that the hour burden to industry for the collection of information necessary to support a license modification is roughly 1,452 hours and a license renewal application can be as many as 290 hours.<sup>3</sup> Industry base salary is estimated to be \$115,294.<sup>4</sup> Base salary is adjusted with the commercial fringe benefit rate based on information available from the Bureau of Labor Statistics. As summarized in Table 1, this results in an estimated industry salary of \$169,062 that includes total employer compensation costs of wages and benefits; accordingly, hourly labor costs are \$ (calculated as  $\$169,062 \div 2,080 = \$81.28$ ).

**TABLE 1. Private Sector Fringe Benefit Factor and Total Compensation Salary**

Category	Estimate
Total Fringe Benefit as % of Total Compensation	31.80%
Industry Total Compensation (Salary + Benefits) <sup>(a)</sup>	\$169,062

Source: News Release, Bureau of Labor Statistics, U.S. Department of Labor, Employer Costs For Employee Compensation - September 2018, <https://www.bls.gov/news.release/pdf/ecec.pdf>.

(a) Calculated as  $\$55.43 \times 1.46627567 = \$81.28$ , then  $\$81.28 * 2,080 = \$169,062$ .

Multiplying the industry collection of information hourly burden by the industry hourly labor cost yields \$235,956 (calculated as  $2,903 \times \$81.28 = \$235,956$ ) per initial application, \$117,978 for a major license modification application (calculated as 50% of the initial application cost) and \$23,596 for a license renewal application (calculated as 10% of the initial application cost). The FAA expects cost estimates to vary widely by the number of applications since commercial space transportation is a rapidly evolving industry. The industry’s growth through technological innovation and the development of new markets increases the challenges associated with

<sup>3</sup> Discussions in 2018 with AST personnel indicate that as much as 10 percent of the 2,903 hours are expended collecting information necessary to support a license renewal application. In addition, data suggests that major modifications require as much as 50% of the 2,903 hours expended for initial applications.

<sup>4</sup> Space transportation salaries are based on information obtained from the U.S. Bureau of Labor Statistics (BLS).

estimating an annual, finite number of initial, modification and renewal applications. Therefore, the FAA provides a low and high range of burden estimates based on a range of potential annual applications.<sup>5</sup> The FAA provides an average for the primary estimate for reporting to OMB and in a notice for public comment published in the Federal Register.

Low Range

Multiplying the application cost by the estimated low range of annual number of applications yields the total annual information collection cost burden to industry associated with the regulations — \$707,868 for initial license applications, \$707,868 for major license modifications, and \$47,191 for renewal applications. This is summarized in Table 2a.

For the low range, the total annual hour burden to industry is 17,998 hours and the total annual cost to industry is \$1,462,927.

**TABLE 2a. Low Range for Burden & Costs to Industry\***

Category	Hour Burden & Costs			
	Initial Application	Modification Application <sup>(a)</sup>	Renewal Application <sup>(b)</sup>	Total
Hours required to submit each application	2,903	1,452	290	n/a
Number of applications per respondent <sup>(d)</sup>	1	1	1	n/a
Annual number of applications <sup>(c)</sup>	3	6	2	11
Total hours	8,709	8,709	580	17,998
Cost per application	\$235,956	\$117,978	\$23,596	n/a
Annual cost <sup>(d)</sup>	\$707,868	\$707,868	\$47,191	\$1,462,927

\*Estimates may not total due to rounding. “n/a” indicates total not applicable for category.

Table notes:

<sup>(a)</sup> Includes major modifications to existing licenses.

<sup>(b)</sup> Renewal of a license application is voluntary; a license is approved for five years.

<sup>(c)</sup> Federal Aviation Administration, Office of Commercial Space Transportation (FAA/AST), 2018.

<sup>5</sup> Ranges developed based on discussions with current applicants and information from FAA’s Office of Commercial Space Transportation. PRA guidance suggests using a range if cost estimates are expected to vary widely (see Paperwork Reduction Act (PRA) Guide, page 40, <https://www.opm.gov/about-us/open-government/digital-government-strategy/fitara/paperwork-reduction-act-guide.pdf>).

<sup>(d)</sup> Industry total cost per annum calculated as  $\$235,956 \times 3 = \$707,868$  for initial applications, major modification applications are calculated as 50% of the initial application cost, or  $\$117,978 \times 6 = \$707,868$ , and renewal applications are calculated as 10% of the initial application cost, or  $\$23,596 \times 2 = \$47,191$  for renewal applications.

### High Range

Multiplying the application cost by the estimated high range of annual number of applications yields the total annual information collection cost burden to industry associated with the regulations — \$1,415,735 for initial license applications, \$1,415,735 for major license modifications, and \$94,285 for renewal applications. This is summarized in Table 2b.

For the high range, the total annual hour burden to industry is 36,002 hours and the total annual cost to industry is \$2,925,755.

**TABLE 2b. High Range for Burden & Costs to Industry\***

Category	Hour Burden & Costs			
	Initial Application	Modification Application <sup>(a)</sup>	Renewal Application <sup>(b)</sup>	Total
Hours required to submit each application	2,903	1,452	290	n/a
Number of applications per respondent <sup>(d)</sup>	1	1	1	n/a
Annual number of applications <sup>(c)</sup>	6	12	4	22
Total annual hours	17,418	17,424	1,160	36,002
Cost per application	\$235,956	\$117,978	\$23,571	n/a
Annual cost <sup>(d)</sup>	\$1,415,735	\$1,415,735	\$94,285	\$2,925,755

\*Estimates may not total due to rounding. “n/a” indicates total not applicable for category.

Table notes:

(a) Includes major modifications to existing licenses.

(b) Renewal of a license application is voluntary; a license is approved for five years.

(c) Federal Aviation Administration, Office of Commercial Space Transportation (FAA/AST), 2018.

(d) Industry total cost per annum calculated as  $\$235,956 \times 6 = \$1,415,735$  for initial applications, major modification applications are calculated as 50% of the initial application cost, or  $\$117,978 \times 12 = \$1,415,735$ , and renewal applications are calculated as 10% of the initial application cost, or  $\$23,571 \times 4 = \$94,285$  for renewal applications.

Primary Estimate

The FAA provides the average of the high and low range of burden and costs in the following table to be used as primary estimates of burden and costs to industry for this collection of information. The total average annual hour burden to industry is 27,000 hours and the total average annual burden costs to industry is \$2,194,342.



**TABLE 2C. Average Industry Burden & Costs\***

Category	Hour Burden & Costs			
	Initial Application	Modification Application	Renewal Application	Total
Average annual number of applications	5	9	3	17
Average total hours	13,064	13,067	870	27,001
Average annual cost	\$1,061,802	\$1,061,802	\$70,738	\$2,194,342

\*Estimates may not total due to rounding.

**Cumulative Industry & FAA Estimate**

Combining estimates for industry and the FAA, the collection would result in total average annual hour burden to industry and the FAA of 62,955 hours (27,000 industry hours + 35,955 FAA hours) and the total average annual cost to industry and the FAA is \$5,174,191 (\$2,194,342 average industry cost + \$2,979,849 average FAA cost).

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

There are neither capital and start-up costs nor operation and maintenance costs resulting from the collection of information in addition to those shown above in item 12 or below in item 14.

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

The FAA provides estimates of hour burden and costs to the Federal Government (FAA) in this section and provides estimates of hour burden and costs to industry in item 12 above. Cumulative industry and FAA hour burden and costs are summarized at the end of both items 12 and 14. The burden to the Federal government associated with information collected to comply with 14 CFR parts 413 and 450 for a vehicle operator license involves several principal activities. These activities include pre-application consultation with industry and review of preliminary information; review of the formal, complete application or increments of the application and its disposition (that is, approval or disapproval); resolution of questions associated with the application; and amending an approved license. The FAA estimates that it expends as many as 3,866 hours to review and process the information collected associated with an application

submittal in compliance with 14 CFR parts 413 and 450. Further, the FAA estimates that the hour burden it incurs to review information necessary to support a license modification can be as many as 1,933 hours and to review a renewal application can be as many as 387 hours.<sup>6</sup> Base salary in 2017 for FAA personnel is estimated to be \$126,526.<sup>7</sup> As summarized in Table 3, the base salary adjusted with Federal government fringe benefits is \$172,392, resulting in an FAA hourly labor cost of \$82.88 (calculated as  $\$172,392 \div 2,080 = \$82.88$ ). Multiplying the FAA hourly burden to review collected information by the Federal government hourly labor cost yields \$320,414 (calculated as  $3,866 \times \$82.88 = \$320,414$ ) to review an initial application, \$160,207 to review a license modification (calculated as 50% of \$320,414), and \$32,041 to review a license renewal application (calculated as 10% of \$320,414).

**TABLE 3. Public Sector Fringe Benefit Factor and Total Compensation**

Category	Estimate
Total Fringe Benefit <sup>(a)</sup>	0
Federal Government Total Compensation (Salary + Benefits) <sup>(b)</sup>	\$172,392

<sup>(a)</sup> Federal fringe benefit factor based on

<https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2008/m08-13.pdf> (latest available).

<sup>(b)</sup> Calculated as  $\$126,526 \times 1.3625 = \$172,392$ .

As discussed above, the FAA expects cost estimates to vary widely by the number of applications since commercial space transportation is a rapidly evolving industry. Therefore, the FAA provides a low and high range of FAA cost estimates based on a range of potential annual applications. The FAA provides an average for the primary estimate for reporting to OMB and in a notice for public comment published in the Federal Register.

### Low Range

Multiplying the application cost by the estimated low range annual number of applications yields the total annual collected information review and processing cost burden to the FAA associated with the collection — \$961,242 for initial licenses, \$961,242 for modified licenses, and \$64,150 for renewals. This is summarized in Table 4a.

For the low range, the total average annual hour burden to the FAA is 23,970 and total average annual costs to the FAA is \$1,986,566.

<sup>6</sup> Discussions in 2018 with AST personnel indicate that as much as 10 percent of the 3,866 hours are expended reviewing and processing the information collected to support a license renewal application.

<sup>7</sup>Base salary from Salary Table 2017-DCB for the locality Pay area of Washington-Baltimore-Arlington, DC-MD-VA-WV-PA, GS-14, Step 5. Fringe benefit factor from <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2008/m08-13.pdf>

**TABLE 4a. Low Range for Burden & Costs to Federal Government\***

Category	Hour Burden & Costs			
	Initial Application	Modification Application <sup>(a)</sup>	Renewal Application <sup>(b)</sup>	Total
Hours required to submit each application	3,866	1,933	387	n/a
Number of applications per respondent <sup>(d)</sup>	1	1	1	n/a
Annual number of applications <sup>(c)</sup>	3	6	2	11
Total annual hours	11,598	11,598	774	23,970
Federal government cost per application	\$320,414	\$160,207	\$32,041	n/a
Federal government annual cost <sup>(d)</sup>	\$961,242	\$961,242	\$64,082	\$1,986,566

\*Estimates may not total due to rounding. “n/a” indicates total not applicable for category.

(a) Includes major modifications to existing licenses.

(b) Renewal of a license application is voluntary.

(c) Federal Aviation Administration, Office of Commercial Space Transportation (FAA/AST), 2018.

(d) Federal government total cost per annum calculated as  $\$320,414 \times 3 = \$961,242$  for initial applications; calculated as 50%, or  $\$160,207 \times 6$ , for each major modifications =  $\$961,242$ ; calculated as 10%, or  $\$32,004 \times 2$  for each renewal application =  $\$64,082$ .

### High Range

Multiplying the application cost by the estimated high range annual number of applications yields the annual collected information review and processing cost burden to the FAA associated with the collection — \$1,922,484 for initial licenses, \$1,922,484 for modified licenses, and \$128,300 for renewals. This is summarized in Table 4b.

For the high range, the total average annual hour burden to the FAA is 47,940 and the total average annual costs to the FAA is \$3,973,132.

**TABLE 4b. High Range for Burden & Costs to Federal Government**

Category	Hour Burden & Costs			
	Initial Application	Modification Application <sup>(a)</sup>	Renewal Application <sup>(b)</sup>	Total
Hours required to submit each application	3,866	1,933	387	n/a
Number of applications per respondent <sup>(d)</sup>	1	1	1	n/a
Annual number of applications <sup>(c)</sup>	6	12	4	22
Total annual hours	23,196	23,196	1,548	47,940
Federal government cost per application	\$320,414	\$160,207	\$32,041	n/a
Federal government annual cost <sup>(d)</sup>	\$1,922,484	\$1,922,484	\$128,164	\$3,973,132

\*Estimates may not total due to rounding. “n/a” indicates total not applicable for category.

(a) Includes major modifications to existing licenses.

(b) Renewal of a license application is voluntary.

(c) Federal Aviation Administration, Office of Commercial Space Transportation (FAA/AST), 2018.

(d) Federal government total cost per annum calculated as  $\$320,414 \times 6 = \$1,922,484$  for initial applications; calculated as 50%, or  $\$160,207 \times 12$ , for each major modifications =  $\$1,922,484$ ; calculated as 10%, or  $\$32,041 \times 4$  for each renewal application =  $\$128,164$ .

### Primary Estimate

The following table provides the average burden and costs to FAA to be used as the primary estimate of burden for this collection of information. The total average annual hour burden to FAA is 35,955 hours and the total average annual cost to FAA is \$2,979,849.

**TABLE 4C. Average Burden and Costs to the Federal Government\***

Category	Hour Burden & Costs			
	Initial Application	Modification Application	Renewal Application	Total
Average annual number of Applications	5	9	3	17
Average total hours	17,397	17,397	1,161	35,955
Average annual costs	\$1,441,863	\$1,441,863	\$96,123	\$2,979,849

\*Estimates may not total due to rounding.

**Cumulative Industry & FAA Estimate**

Combining estimates for industry and the FAA, the collection would result in total average annual hour burden to industry and the FAA of 62,955 hours (27,000 industry hours + 35,955 FAA hours) and the total average annual cost to industry and the FAA is \$5,174,191 (\$2,194,342 average industry cost + \$2,979,849 average FAA cost).

**15. Explain the reasons for any program changes or adjustments.**

The estimated annual number of applications has been increased and annual salary figures have been updated from the existing two collections, which are discussed under question one above, and which have been consolidated and updated to develop the new collection. The FAA continues to separate collection activity into appropriate information collections, there has not been additional forms or applications added.

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

The FAA does not publish the results of this collection of information.

**17. If seeking approval to not display the expiration date of OMB approval of the information collection, explain the reasons that display would be inappropriate.**

No approval is sought.

**18. Explain each exception.**

There are no exceptions.