

Supporting Statement A
COMMERCIAL SPACE TRANSPORTATION LICENSING REQUIREMENTS
FOR OPERATION OF A LAUNCH SITE 2120-0644

This collection is being renewed. There are no revisions to the previous collection. The cost data has been updated to reflect increased hourly rates and can be found in sections 12 for public burden and section 14 for government burden.

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

The data requested for a license application to operate a commercial launch site are required by 51 USC 509—Commercial Space Launch Activities. The information is needed in order to demonstrate to the FAA Office of Commercial Space Transportation (FAA/AST) that the proposed activity meets applicable public safety, national security, and foreign policy interest of the United States.

Launch regulations were issued by the Department of Transportation in 1988, which reflect the Government's view that maintaining an efficient and reasonable regulatory approach is vital to the commercial space launch industry. Privatized space launch facilities require clear and concise regulations to facilitate federal oversight. The first non-federal launch site ("spaceport") license was issued in 1996.

This information collection activity supports the Department of Transportation's strategic goal on safety. This goal is to promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

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.

This information collection is mandatory for privatized space launch facilities or entities wishing to become a privatized space launch facility. This information collection requirement is intended to enable FAA/AST to incorporate acquired data into the license, which subsequently becomes binding on the site operator. FAA/AST issues a site operator license based on the site operator's demonstration of the ability to ensure public safety and the safety of property, both on and off the site.

Under the policy review and approval process, an applicant that seeks to operate a launch or reentry site is required to submit information identifying foreign ownership of the launch site or reentry site enterprise. FAA/AST determines, before issuing a license, if issuance of such a license would jeopardize the foreign policy or national security interest of the United States. The Launch Site Location Review and Approval provision requires the applicant to conduct an analysis that objectively determines whether the

location of a proposed launch or reentry site can support the launch or reentry of a suborbital launch vehicle or, at a minimum, one class of orbital launch vehicle on at least one trajectory. Finally, the applicant is required to submit an explosive site plan, which complies with established levels of risk calculations to acceptable exposure to destructive forces. The collection information is disclosed as part of an application to operate a launch or reentry site. The information collection is only needed once during the application unless the information changes.

In accordance with 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, DOT Order 5610.1C, applicants are required to submit environmental information concerning proposed new launch sites and launch vehicles that are not currently described in the environmental impact statements, as well as payloads that may have significant environmental impacts in the event of a launch or reentry accident.

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 Reduction Act, a website is maintained to improve the ability of the public to access information pertaining to the collection of information, and the information may be submitted 100% electronically.

However, due to the highly sensitive and proprietary nature of information collected, license applicants often choose to submit their information through secure mail or couriers. Also, a small number of applicants is expected, and therefore the number of paperwork submissions will remain very low. 25% of the information is expected to be submitted electronically. The information collected is not made available to the public because it is proprietary.

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.

For sites that are not located within a Federal launch range, an applicant is not obligated to comply with Federal launch range procedures nor does an applicant have the continuing oversight of a Federal launch range. Therefore, this arrangement decreases the burden on industry. In the case of renewals, an applicant may reference previously submitted information with noted changes. The FAA is not aware of other government agencies that collect such information as required for licensing applications to operate commercial launch or reentry sites.

5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

Pursuant to the Regulatory Flexibility Act of 1980 (RFA), FAA/AST certifies that the rule does not have a significant economic impact on a substantial number of small entities. Regulations are written to allow flexibility and innovation.

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

The frequency of recordkeeping or reporting is contingent upon the respondent submitting a launch site or reentry site license application.

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

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

This requirement follows the guidelines in 5 CFR 1320.5(d)(2)(i)-(viii).

8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the 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 60-day notice was published in the Federal Register on January 13, 2021 (86 FR 2721), to solicit comments on the collection related to Commercial Space Transportation License Requirements for Operation of a Launch Site. No comments were received.

9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

There are no payments or special compensation to respondents.

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

All information collected, including company proprietary information, will be protected in accordance with the Freedom of Information Act.

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.

No sensitive information is required.

12. Provide estimates of the hour burden of the collection of information. The statement should:

The FAA Office of Commercial Space Transportation issued two new site licenses in the last three years. The estimate of zero to one new license per year is still valid for the next three years.

The burden estimates for industry in completing the launch site or reentry site license application are based on hours required for pre-application consultation, preparation of the license application, and resolution of questions associated with the application process. The FAA estimates that the number of industry and government hours needed to process a reentry site application is similar to that of a launch site license.

Industry representatives were consulted about the amount time required for the license applications activities listed above. The range of estimates received from industry was extremely wide and therefore the numbers included here represent an average and best estimate for hours and costs to industry. Some license applicants are able to take advantage of existing environmental information required for a site license while other applicants may have to start from the beginning of the process. The launch site license is valid for a period of five years and it is assumed that all licenses would be renewed after five years. It is estimated that there will be zero to one launch site applicants per year, and zero to one reentry site applicants per year, over a three-year period beginning in 2019.

As shown in Table 1, the estimated cost to industry per application (\$179,816) is calculated by multiplying the estimated hourly wage rate (\$77.44) by the estimated average hours required for the application (2,322). The industry hourly rate (\$77.44) is the unit labor cost for aerospace engineering personnel involved in gathering, reviewing, and formatting the information required in each license application. Labor rate is based on Bureau of Labor statistics hourly rate of \$58.23 for an Aerospace Engineer in the Occupational Employment and Wages, May 2020 (<https://www.bls.gov/oes/current/oes172011.htm>) and an hourly benefit rate of \$19.21 for a professional and related percentage of total compensation of 30.3% in table 4 of the Employer Costs for Employee compensation for private industry workers by occupation and industry (<https://www.bls.gov/news.release/pdf/ecec.pdf>). The annual costs per year for the launch site licenses (\$0 to \$179,816) are calculated by multiplying the estimated cost per application (\$179,816) by the total number of applications received on a yearly basis (0 to 1). The annual costs per year for the reentry site licenses (\$0 to \$179,816) are calculated by multiplying the estimated cost per

application (\$179,816) by the total number of applications received on a yearly basis (0 to 1).

Table 1: Estimated Burden Hours and Annual Costs to Industry for Launch Site and Reentry Site Operator Licensing Regulations

	Launch Site	Reentry Site
Annual number of applicants	0 to 1	0 to 1
Annual number of applications per applicant	1	1
Total annual applications	0 to 1	0 to 1
Industry hours to submit an application	2,322	2,322
Total annual industry hours	0 to 2,322	0 to 2,322
Industry hourly rate	\$77.44	\$77.44
Cost to industry per application	\$179,816	\$179,816
Total estimated annualized costs	\$0 to \$179,816	\$0 to \$179,816
Total annual industry hours (launch site and reentry site)	4,644	
Total estimated annualized costs (launch site and reentry site)	\$359,632	

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

There is no additional cost other than that shown in item 12.

14. Provide estimates of annualized costs to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information.

The estimated annualized cost to FAA/AST to certify safe operations at commercial launch sites is \$0 to \$400,400, and for reentry sites is \$0 to \$400,400 (see Table 3). The cost to the government for processing the license is driven by procedures involving review and analysis of the information contained in the application. Based on the 2021 GS 13 Step 5 wage for the Washington DC area, the annual cost per federal worker is \$117,516. The government hourly rate (\$56.50) is calculated by dividing the annual salary by the total yearly government working hours (2,080) per worker. A fringe benefit multiplier of 36.25% is used to increase the government hourly rate to \$75.98.

The estimated cost to process the collected information is calculated by multiplying the average hourly wage rate (\$75.98) by the estimated total hours (2,000 to 5,600). The low end of the range of hours represents work on existing facilities that require only an EA and will only support the launches of reusable launch vehicles. The high end of the range of hours represents work on new facilities that require an EIS and do plan to support launches of expendable and reusable launch vehicles. The total annual government hours for processing launch site license applications (0 to 5,600) are calculated by multiplying government hours required to process each application (2,000 to 5,600) by the total number of new applications (0 to 1). The total estimated annualized costs for launch site applications (\$0 to \$425,488) are calculated by multiplying the cost to the government per application (\$151,960 to \$425,488) by the total annual applications (0 to 1). The total annual government hours for processing reentry site license applications (0 to 5,600) are calculated by multiplying government hours required to process each application (2,000 to 5,600) by the total number of new applications (0 to 1). The total estimated annualized costs for launch site applications (\$0 to \$425,488) are calculated by multiplying the cost to the government per application (\$151,960 to \$425,488) by the total annual applications (0 to 1). The

maximum annual cost to the federal government for applications for both launch sites and reentry sites is \$850,976 (\$425,488 + \$425,488).

Burden estimates for the government are based on those hours required for facilitating pre-application consultation; license application acceptance and review procedures; disposition of a license (i.e., approved or disapproved); and issuance of the license. The government estimates include environmental personnel.

Table 3: Estimated Burden Hours and Annual Costs to Government for Launch Site and Reentry Site Operator Licensing Regulations

	Launch Site	Reentry Site
Annual number of applicants	0 to 1	0 to 1
Annual number of applications per applicant	1	1
Total annual applications	0 to 1	0 to 1
Government hours to process an application	2,000 to 5,600	2,000 to 5,600
Total annual Government hours	0 to 5,600	0 to 5,600
Government hourly rate	\$75.98	\$75.98
Cost to Government per application	\$151,960 to \$425,488	\$151,960 to \$425,488
Total estimated annualized costs	\$0 to \$425,488	\$0 to \$425,488

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

There are no changes or adjustments. The cost data has been updated to reflect current increased hourly rates.

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

FAA/AST does not intend to publish this information.

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

No approval is sought.

18. Explain each exception to the topics of the certification statement identified in “Certification for Paperwork Reduction Act Submissions.”

There are no exceptions.