

**COMMERCIAL SPACE TRANSPORTATION REUSABLE LAUNCH
VEHICLE MISSION LICENSING REGULATIONS**

14 CFR Part 431

Effective November 2000

And

**COMMERCIAL SPACE TRANSPORTATION REENTRY OF A VEHICLE
OTHER THAN A REUSABLE LAUNCH VEHICLE LICENSING
REGULATIONS**

14 CFR Part 435

Effective November 2000

**Paperwork Reduction Act Submission by Federal Aviation Administration, Office
of Commercial Space Transportation to
Office of Management and Budget**

August 31, 2011

This document outlines the information collection requirements associated with the proposed rules to be submitted to the Office of Management and Budget (OMB) for approval.

JUSTIFICATION

1. Explain the circumstances that make collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. The data is necessary for a U.S. citizen to apply for and obtain a reusable launch vehicle (RLV) mission license or a reentry license for activities by commercial or non-federal entities (that are not done by or for the U.S. Government) as defined and required by 49 U.S.C., Subtitle IX, Chapter 701, formerly known as the Commercial Space Launch Act of 1984, as amended. 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 interests of the United States.

The FAA issued the final rule for Commercial Space Transportation Reusable Launch Vehicle and Reentry Licensing Regulations in 2000. Related to these, a final rule for Human Space Flight Requirements for Crew and Space Flight Participants was issued in 2007.

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. The information to be collected includes data required for

performing a safety review, which includes a technical assessment to determine if the applicant launches or reenters an RLV or a reentry vehicle to a designated site without jeopardizing public health and safety and the safety of property. This information collection requirement is intended for incorporating acquired data into the license, which then becomes binding on the launch and/or reentry operator. The rule contains provisions for two types of licenses for reusable launch vehicles (RLV): mission-specific license and reentry operator license, and two types of licenses for reentry of reentry vehicles (RV) other than RLV: reentry-specific license and reentry operator license.

Under the policy review and approval process, an applicant would be required to submit information that enables FAA/AST to summarize the application requirements identifying foreign ownership of the vehicle. FAA/AST determines, before issuing a license, if issuance of an RLV mission license would jeopardize the foreign policy or national security interests of the U.S.

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 will be required to submit environmental information concerning proposed RLVs and reentry 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 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, 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 office is pursuing the following improved information technology enhancements:

- In accordance with the Government Paperwork Elimination Act, a website is maintained to improve the ability of the public to access information pertaining to the collection of information.

However, due to the highly sensitive and proprietary nature of information collected, license applicants generally 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.

4. Efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for purposes described in Item 2 above. Due to the proprietary nature of the information collected, it is not publicly available and the FAA is the only agency that collects this type of information. The agency is not aware of other government agencies that collect such information pertaining licensing of RLV mission or reentry vehicle operations.
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/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 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. The frequency of record keeping or reporting is contingent upon the respondent submitting a launch or reentry license application for launch or reentry of a vehicle or operation of a commercial or non-Federal reentry site.
7. Explain any special circumstances that would cause the requirement to be inconsistent with guidelines 5 CFR 1320.5(d)(2)(i)-(viii). This requirement follows 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 recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported. FAA/AST, in February 1999, released information guidelines during a public meeting that describes the information that an RLV mission license applicant and a reentry vehicle applicant should provide to FAA/AST in order to receive an RLV mission license or reentry license. An NPRM was published on April 21, 1999. Comments received were considered in the writing of the final rule.

A 60-day notice was published in the Federal Register on June 21, 2011, vol. 76, no. 119, page 36168 to solicit comments on the collection related to Commercial Space Transportation Reusable Launch Vehicle Reentry Licensing Regulations. No comments were received.

9. Explain any decisions to provide any payment as gift to respondents, other than reenumeration 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. All information collected, including company proprietary information, will be protected in accordance with part 413.9 of the Code of Federal Regulations and 49 USC 70114.

Under Part 413.9, "Confidentiality," of the Code of Federal Regulations:

"(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...."
... "(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."

49 U.S. Code, Subtitle IX, Chapter 701, Section 70114, "Disclosing information," states that "The Secretary of Transportation, an officer or employee of the United States Government, or a person making a contract with the Secretary under section 70106(b) of this title may disclose information under this chapter that qualifies for an exemption under section 552(b)(4) of title 5 or is designated as confidential by the person or head of

the executive agency providing the information only if the Secretary decides withholding the information 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 burden estimates for industry in completing the RLV mission license application are based on the hours required for pre-application consultation, preparation of the license application, and resolution of questions associated with the application process. It is estimated that the number of RLV license applicants will range from three to six per year over a three-year period beginning in 2012. It is estimated that the number of reentry license applicants will range from two to three per year over a three-year period beginning in 2012. Because of the similarities between reentry vehicles and RLVs, the FAA is using the burden estimates for reentry vehicles based on RLV applications.

It should be noted that companies may choose to apply for an Experimental Permit before an RLV mission license. Permits were established in the 2004 Commercial Space Launch Amendments Act and are available only for suborbital reusable launch vehicles on flights not for compensation or hire. Experience gained from permit activity could reduce the number of hours needed for both industry and government to process an RLV mission license.

As shown in Table 1, the total estimated annualized costs to industry per year for all RLV mission license applications (and reentry vehicles) is calculated by multiplying the estimated cost to industry per application by the total annual applications. Discussions with industry representatives resulted in a substantial range in the estimates of hours required to obtain a RLV mission license. Therefore, hours and cost estimates provided in this document encompass the range of estimates offered by industry. The estimated cost to industry per application ranges from \$189,150 to \$315,250.

The total annual industry hours for submitting licensing applications (3,000 to 15,000) are calculated by multiplying industry hours to submit an application (3,000 to 5,000) by total annual applications (3 to 6). The industry hourly rate (\$63.05) is the unit labor cost for aerospace engineering personnel involved in gathering, reviewing, and formatting the information required in each license application. The industry hourly rate is based on aerospace engineering personnel only; it does not include rates for executive or managerial personnel. The industry hourly rate includes a fringe benefit multiplier of about 32 percent, based on discussions with industry. The estimated cost to industry per application (\$189,150 to \$315,250) is calculated by multiplying the estimated unit labor cost by the estimated industry hours required to submit an application (3,000 to 5,000). The total estimated annualized costs (\$567,450 to \$1,891,500) are calculated by multiplying the cost to industry per application by the total annual applications (3 to 6).

Table 1: RLV Mission (and Reentry Vehicle) License Regulations Estimated Burden Hours and Annual Costs to Industry

	<u>Low</u>	<u>High</u>
Annual number of applicants	3	6
Annual number of applications per applicant	1	1
Total annual applications	3	6
Industry hours to submit an application	3,000	5,000
Total annual industry hours	9,000	30,000
Industry hourly rate	\$63.05	\$63.05
Cost to industry per application	\$189,150	\$315,250
Total estimated annualized costs	\$567,450	\$1,891,500

Based on our estimates for an upper and lower limit for the response rate and submission time, we calculate an average of **19,500 burden hours annually**.

13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. There is no additional cost other than that shown in Item 12.

14. Provide estimates of annualized cost to the Federal government. The estimated annualized cost for FAA/AST to administer the provisions of the regulation for a single application ranges from \$155,160 to \$310,320 (see Table 2). Based on the 2010 GS 13 Step 5 wage, an annual cost of \$81,230 per federal worker. The government hourly rate (\$47.60) is calculated by dividing the annual salary by the total yearly government working hours (2,080) per worker. A fringe benefit multiplier of 32.45% is used to increase the government hourly rate to \$51.72. The total annual government hours for processing RLV mission license applications (9,000 to 36,000) are calculated by multiplying government hours required to process each application (3,000 to 6,000) by the total number of new applications (3 to 6). The total estimated annualized costs (ranging from \$465,480 to \$1,861,920) are calculated by multiplying the cost to the Government per application (\$155,160 to \$310,320) by the total annual applications (3 to 6).

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.

Table 2: RLV Mission (and Reentry Vehicle) License Regulations Estimated Burden Hours and Annual Costs to Government

	<u>Low</u>	<u>High</u>
Annual number of applicants	3	6
Annual number of applications per applicant	1	1
Total annual applications	3	6
Government hours to process an application	3,000	6,000
Total annual Government hours	9,000	36,000
Government hourly rate	\$51.72	\$51.72
Cost to Government per application	\$155,160	\$310,320
Total estimated annualized costs	\$465,480	\$1,861,920

15. Explain the reasons for any program changes or adjustments. Adjustments are a result of using 2010 labor rates for the calculation of government and commercial burden costs. The government rate is based on the 2010 national average salary and hourly rate for GS13, step 5 employees. The industry rate is based on the 2010 Bureau of Labor Statistics average annual salary for aerospace engineers.

FAA/AST has more data since the previous submission that allows for improved accuracy in estimating hours and costs required for license applications to be processed. Additionally, the changes reflect the current forecast for license applications.

16. For collections of information whose results will be published, outline plans for tabulation, and publication. FAA/AST does not intend to publish this 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.