

Supporting Statement A
NOTICE OF PROPOSED OUTDOOR LASER OPERATION(S) OMB No. 2120-0662

FAA changed this statement in compliance with the current template and updated information. The following major changes (by question number) reflect the current environment based on submissions received.

- 1: Added legal authority and explained linkage from authority to collection
- 2: Added content to explain the use and processing of the information collected
- 3: Updated information in accordance with new template
- 4: Explained lack of duplication
- 7: Updated information in accordance with new template, re 30 days
- 8: Updated information in accordance with new template, re public comments and consulting with professionals beyond the Federal Aviation Administration
- 12: Updated burden estimates based on submissions received and changes in cost due to inflation
- 14: Updated burden estimates based on submissions received and changes in cost due to inflation
- 15: 12: Updated burden estimates based on submissions received

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

Title 49 of the United States (U.S) Code (U.S.C.), Section 40103 gives the Administrator of the Federal Aviation Administration (FAA) the authority to regulate, control, develop plans for, and formulate policies with respect to the use of the navigable airspace. Title 21 U.S.C. delegates regulatory authority for laser light products to the Food and Drug Administration (FDA). Per FDA authority, 21 Code of Federal Regulations (CFR) has detailed product regulations in 21 CFR § 1010, Performance Standards for Electronic Products, and Part 1040, Performance Standards for Light Emitting Products.

No laser light show, projection system, or device may vary from compliance with 21 CFR § 1040.11(c) in design or use without the approval of FDA. To obtain approval for a variance, proponents complete FDA Form 3147 (Application for a Variance from 21 CFR 1040.11(c) for a Laser Light Show, Display, or Device) in accordance with 21 CFR § 1010.4.

As stated on FDA Form 3147, as part of a proponent's application for FDA variance, advance written notification will be made as early as possible to appropriate federal, state, and local authorities providing show itinerary with dates and locations clearly and completely identified, and a basic description of the proposed effects including a statement of the maximum power output intended. FDA Form 3147 lists FAA for any projections into open airspace at any time. If the FAA objects to any laser effects, the objections will be resolved and any conditions requested by FAA will be adhered to. If these conditions cannot be met, the objectionable effects will be deleted from the show.

To notify FAA of a proposed outdoor laser operation, proponents complete and submit FAA Form 7140-1, Notice of Proposed Outdoor Laser Operation(s), to the appropriate FAA service center. FAA Form 7140-1 is the approved (and proposed for renewal) method for collecting information required to process submissions from proponents.

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.

Laser operators planning to conduct outdoor laser operations requiring a variance from 21 CFR 1040.11(c) voluntarily disclose highly technical data about the proposed operation via FAA Form 7140-1. Proponents submit forms on an as-needed basis. FAA uses the disclosed information to determine the potential effect of the proposed operation on users of the United States (U.S.) National Airspace System (NAS). When 1 of the 3 FAA service centers receives a Form 7140-1 from a proponent, personnel review the information in accordance with FAA Order JO 7400.2, Procedures for Handling Airspace Matters. Chapter 29 of this order, Outdoor Laser Operations, prescribes policy, responsibilities, and guidelines for processing a Notice of Proposed Outdoor Laser Operation(s) and determining the potential effect of outdoor laser activities on users of the NAS.

To process information submitted by a proponent, FAA personnel conduct an aeronautical review of all proposed laser operations to ensure an operation will not have a detrimental effect on aircraft operations. During the review, FAA may consult FDA/Center for Devices and Radiological Health (CDRH) personnel for technical advice and/or consult SAE International Aerospace Standard (AS) 6029A, Performance Criteria for Laser Control Measures Used for Aviation Safety. Along with considering local air traffic flows, FAA considers the protection distance calculations and any control measures described by the proponent.

Upon completion of the aeronautical review, FAA renders a determination for the proposed outdoor laser operation. The determination must be either objectionable or non-objectionable. A non-objectionable letter of determination (LOD) issued by FAA is not permission nor an endorsement of the outdoor laser operation. FAA does not have any known requirement or history of disseminating to the information collected to the public (see question 10 for further information).

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.

FAA Form 7140-1 is a publicly available, fillable pdf document, available at <https://www.faa.gov/forms/index.cfm/go/document.information/documentID/186172>. After proponents complete the form, they may e-mail, fax, or mail the form to FAA. In discussion with FAA service center personnel who coordinate directly with submitting proponents, FAA estimates it receives 90% of the forms via e-mail. FAA uses the

collected information to correspond directly with the proponent and does not have any known requirement or history of disseminating to the information collected to the public (see question 10 for further information).

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.

FDA (FDA Form 3147/OMB No. 0910-0025) collects similar information to that required to complete FAA Form 7140-1. While some similarities exist, the information required by FAA to perform an aeronautical review is a different level of detail compared to information collected by FDA and is therefore not duplicative.

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

The only proponents required to submit the data are the operators that conduct outdoor laser operations. The form asks for the minimum information necessary for FAA to determine the effect of proposed outdoor laser operations on users of the NAS.

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.

If the data is not collected, FAA cannot evaluate the proposed outdoor laser operation. Not evaluating a proposed operation may lead to introducing an unacceptable risk to the NAS. If a laser strikes an aircraft, the laser may cause either eye injury, skin burns, or temporary situational disorientation (e.g., as experienced with oncoming headlights). Laser strikes can lead to temporary visual impairment, loss of dark adaptation, distraction, and disorientation. If a pilot experiences the effects, a laser strike can lead to loss of life, especially at critical phases of flight, such as take-off or landing. Additionally, some of these effects can result in permanent eye damage.

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.*

Laser operators are required to submit a form for each proposed outdoor laser operation. Each operation is unique and requires FAA to determine the potential impact to the NAS. As this is a proposed renewal, there is no 30-day effect as proponents already submit this information as required for each operation.

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 Federal Register Notice published on January 29, 2021 (86 FR 7611) and solicited public comment. FAA received one comment from two contributing authors. The comment supported past changes made to the technical aspects of FAA Form 7140-1 and raised multiple points with suggestions to improve, notably: defining regulatory authority, when to submit a form, combining the form with another document, and clarifying language on the form. FAA appreciates the time taken by the authors to comment and addresses the comments below.

The commenters suggested revising the form enhance clarity of regulatory authority and when to submit a form. Title 49 of the United States (U.S) Code (U.S.C.), Section 40103 gives the Administrator of the Federal Aviation Administration (FAA) the authority to regulate, control, develop plans for, and formulate policies with respect to the use of the navigable airspace. Food and Drug Administration (FDA) has the authority to regulate laser light products Under Title 21 U.S.C., individuals seeking a variance from 21 CFR § 1040.11(c) must apply for approval from FDA. If an applicant applying for a variance intends to project into open airspace at any time, the applicant will notify the FAA as an

alternate means of radiation protection. This notification is best using FAA Form 7140-1. FAA acknowledges the comments about regulatory authority and when to submit a form, and will consider editing FAA Form 7140-1 to increase clarity.

To assist proponents with completing FAA Form 7140-1, FAA created an advisory circular (AC) in collaboration with industry and other federal entities. The current version is AC 70-1A. The commenters recommended that FAA include FAA Form 7140-1 within AC 70-1A (as amended) and no other place. FAA appreciates the comment, strives for simplicity, and agrees with the value of alerting potential respondents to the associated AC. However, to maintain effective version control, FAA will continue to host the form independent of the AC and with reference on the instructions back to the AC. The commenters also expressed the desire to link the form and AC in a more intuitive manner. FAA is removing the form from future versions of AC 70-1 to enhance version control, reduce confusion, and provide clearer instructions on the form to reference the AC.

The commenters also discussed other language found on the form and suggested change. While FAA must include some language as part of the Paperwork Reduction Act (PRA) compliance, FAA modified language on the form submitted for renewal to enhance ease of understanding.

In addition to public comment, FAA has a formal collaborative relationship with FDA/CDRH via memorandum of understanding to codify this enduring association. FAA also has an ongoing collaborative relationship with SAE International, which has 145,000 members. SAE International produces thousands of industry standards, including ones for lasers. SAE International has a G10T Laser Safety Hazards Committee comprised of government and industry membership. FDA/CDRH is a member of this committee.

FAA collaboratively developed Form 7140-1 and FAA Advisory Circular (AC) 70-1A with the G10T to validate the type of information required to determine the impact to the NAS and additional information to assist proponents in completing and submitting the form. SAE International also provided FAA with the same mathematical formulas used by industry today. FAA, FDA/CDRH, and G10T will continue to collaborate and improve the documents.

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

FAA does not provide payments or gifts for this information collection.

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

There is no assurance of confidentiality. As the proponents provide their information to one of the three FAA service centers, FAA personnel process the forms locally and

return a determination to the proponent. FAA does not share the submitted information with other proponents.

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.

FAA does not require sensitive information for this information collection.

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

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices. * If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**
- **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included under item 13.**

The number of responses varies from month to month. FAA collected 603 responses during fiscal year (FY) 2019. This is a 33% increase from the 405 responses collected in FY 2017. The estimated time for a proponent to complete the form remains four hours (no change from previous estimate) per discussion with the three FAA service centers which correspond directly with the proponents.

The total estimated time for proponents to complete all responses for FY 2019 was (4 hours x 603 responses) 2,412 hours. The burden can vary based on the number of lasers involved.

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
# of Respondents			603
# of Responses per respondent			1

Summary (Annual numbers)	Reporting	Recordkeeping	Disclosure
Time per Response (hours)			4
Total # of responses			603
Total burden (hours)			2,412

The annual mean wage of an individual capable of submitting the form is \$57,670¹ per year. Including benefits², it costs the average small business \$74,798³ per year to employ this individual, which translates to \$35.96 per hour⁴⁵⁶. At this hourly rate, the annualized estimated cost to complete all forms for a given year (based on 603 FY 2019 responses at 4 hours per response) is approximately \$86,737. This is an overall estimated cost increase of 36% based on a 33% increase in form submissions and salary increase since the last estimate.

Employee Salary (Mean in \$)	Benefits Constant	Total Employee Cost (\$)	Hours Constant	Cost per Hour (\$)
57,670.00	1.297	74,797.99	2,080	35.96

Number of Submissions	Hours per Submission	Hours Total	Cost per Hour (\$)	Estimated Total Cost (\$)
603	4	2,412	35.96	86,736.90

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

There is no material cost. Proponents are only completing a form which asks for information they are normally familiar with. They can e-mail, fax, or mail the form to one of FAA's three service centers.

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.

¹ Lighting Technician (Occupation Code 27-4098) salary information derived from May 2020 Bureau of Labor and Statistics (BLS) North American Industry Classification System (NAICS) 711000 (Performing Arts, Spectator Sports, and Related Industries) per https://www.bls.gov/oes/current/naics3_711000.htm.

² December 2020 BLS report states private industry worker wage and salary accounts for 70.3% of employer costs <https://www.bls.gov/news.release/ecec.nr0.htm>.

³The annual cost estimate increased by 8% compared to the estimate provided for the current collection.

⁴ Previous collection estimate used 2,000 hours.

⁵ BLS uses 2,080 as the standard number of hours worked in a year.

⁶ The hourly cost estimate increased by 4% compared to the estimate provided for the current collection.

The number of responses varies month to month. FAA collected 603 responses during FY 2019. This is a 33% increase from the 405 responses collected in FY 2017. The estimated time for the government to process the form remains four hours (no change from previous estimate) per discussion with the three FAA service centers.

The total estimated time for FAA to process all responses for FY 2019 was (4 hours x 603 responses) 2,412 hours. This burden can vary based on the number of lasers involved.

The approximate annual salary for a government employee working as a support specialist in the U.S. at grade K is \$149,140 per year⁷, or \$71.70 per hour⁸. At this hourly rate, the annualized estimated cost to process all forms for a given year (based on 603 FY 2019 responses at 4 hours per response) is approximately \$172,944. This is an overall estimated cost increase of 42% based on a 33% increase in form submissions and salary increase since the last estimate.

Employee Salary (Mean in \$)	Locality Pay	Total Employee Cost (\$)	Hours Constant	Cost per Hour (\$)
128,624.00	1.16	149,139.53	2,080	71.70

Number of Submissions	Hours per Submission	Hours Total	Cost per Hour (\$)	Estimated Total Cost (\$)
603	4	2,412	71.70	172,944.49

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

FAA adjusted the estimated burden based on the number actual of responses received for FY2019 as this was the last year prior to the public health emergency (prior to numerous cancelled events). FAA used this number to calculate estimated burden for proponents who complete and submit forms and FAA personnel who process the submissions. Responses to questions 12 (collection/submission) and 14 (costs to government) explain changes to burden and costs.

In addition to updating the burden and cost, FAA updated (draft) Form 7140-1. A summary of changes follows. All reference to numbers on a page are sections or cells within that page.

- Title page
 - o Clarified when and how to complete and submit the form
 - o Clarified linkage to the FAA AC and other reference documents
 - o Modified PRA statement to reflect changes to burden
 - o Removed OMB statement to reduce regulatory confusion
- Pages 1 and 2

⁷ https://employees.faa.gov/org/staffoffices/ahr/program_policies/policy_guidance/compensation/PayTables/.

⁸ The annual salary with nationwide locality adjustment increased by 17% compared to data provided for the current collection.

- o Standardized all fonts (e.g., type, size, and capitalization) and enhanced tooltips for ease of reading and completing the form
- o Rearranged “tab” sequence of cells for ease of completion
- o Changed cell size to provide more space where FAA commonly receives more information
- o Rearranged some cells for a more logical flow of information and increased clarity of alignment between cells, e.g., 7a through 7c.
- o Added “print” buttons for ease of submission
- Page 2
 - o Removed 11g and 11h as FAA does not require that information
 - o 12a: Added examples and ensured entries in one column did not force unintended entries in another column
 - o 12b: Changed power unit from Watts milliwatts to align with common industry usage
 - o 13 and 15: Updated terms

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 will not publish the results.

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.

FAA will display the expiration date on the form.

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

There are no exceptions to the certification statement.