

**Department of Transportation  
Federal Aviation Administration**

**SUPPORTING STATEMENT**

**Operation of Small Unmanned Aircraft Systems over People**

RIN 2120-AK85

OMB Control Number 2120-0775

**INTRODUCTION**

The Department of Transportation (DOT) submits this final Supporting Statement to the Office of Management and Budget (OMB) in preparation for requesting an approval for information collections related to the final rule titled “Operation of Small Unmanned Aircraft Systems over People.” DOT requests this information collection approval include information an applicant or manufacturer submits to receive acceptance from the Federal Aviation Administration (FAA) for a means of compliance or a declaration of compliance, both of which are critical components of the final rule’s framework for ensuring small unmanned aircraft systems (small UAS) are constructed to fulfill the performance-based requirements of the FAA’s rule. DOT also requests this information collection approval include development of remote pilot operating instructions. In addition, this supporting statement includes the items that a manufacturer the holder of a declaration of compliance must include or display with a small UAS that is eligible to operate over people; these include the label on the small unmanned aircraft and remote pilot operating instructions.

**Part A. Justification:**

**1. Circumstances that make the collection of information necessary.**

In 2012, Congress passed the FAA Modernization and Reform Act of 2012 (Public Law 112-95). Section 333 of Public Law 112-95 directed the Secretary to determine which types of unmanned aircraft systems (UAS), as a result of their size, weight, speed, operational capability, proximity to airports and populated areas, and operation within visual line of sight do not create a hazard to users of the national airspace system (NAS) or the public or pose a threat to national security. Based on this direction, DOT and the FAA promulgated 14 CFR part 107, which allows operations of small UAS. Operation and Certification of Small Unmanned Aircraft Systems, 81

FR 42063 (June 28, 2016). In 2018, Congress updated the authority basis for part 107, which is now codified at 49 U.S.C. 44807.

Part 107 previously prohibited operations of small UAS at night, over people, and over moving vehicles in the absence of a waiver that allows such an operation. See 14 CFR §§ 107.29 and 107.39. Based on the FAA's experience with the certification, exemption, and Certificate of Waiver or Authorization process, as well as research relevant to assessing the risks of operations of small UAS at night, over people, and over moving vehicles, the FAA now will permit such operations, pursuant to performance-based requirements. To ensure compliance with certain requirements, the FAA must review information from applicants whose intention is to receive a determination from the FAA that the small UAS is eligible to operate over people. Without engaging in such information collections, the FAA would be unable to ensure compliance with the proposed performance-based requirements.

The information the FAA will review under the final rule includes applications requesting acceptance of means of compliance, as well as applications for acceptance of declarations of compliance that use an accepted means of compliance. These information collection requirements applies only to small UAS that a person seeks to operate in accordance with Category 2 or Category 3 of the final rule.<sup>1</sup> For these categories, the final rule requires that declarations of compliance include certain types of specific information. The FAA will only require the minimum amount of information necessary to ensure the FAA could identify an applicant and evaluate the small UAS on which the declaration of compliance is based.

In addition to requesting acceptance of declarations of compliance, holders of an FAA-accepted declaration of compliance for small UAS that would be eligible for operations over people will be required to label the small unmanned aircraft with the appropriate category in which the small UAS would be eligible to operate. Such labeling would ensure the remote pilot in command who seeks to operate over people is informed of the category of operation in which the small unmanned aircraft is eligible to operate, in addition to the requirement for the remote pilot in command to ensure the small unmanned aircraft is listed on an FAA-accepted declaration of compliance. The final rule also requires holders of an FAA-accepted declaration of compliance to accompany each small UAS eligible to operate over people with remote pilot in command operating instructions. These instructions will ensure the remote pilot in command is aware of conditions that may render the small UAS ineligible to operate over people; for example, when the FAA's acceptance of a declaration of compliance is contingent upon restricting certain types

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<sup>1</sup> For Category 2 operations, the small unmanned aircraft must be designed, upon impact with a person, to not result in an injury equivalent to or more severe than the injury that would result from a transfer of 11 ft-lbs of kinetic energy from a rigid object. For Category 3 operations, the small unmanned aircraft must be designed, upon impact with a person, to not result in an injury equivalent to or more severe than the injury that would result from a transfer of 25 ft-lbs of kinetic energy from a rigid object. For both categories, the small unmanned aircraft used in the operation would be prohibited from having any exposed rotating parts that could lacerate human skin and from having safety defects.

of payloads, the operating instructions would list such contingencies. Labeling, remote pilot operating instructions, and an FAA-accepted declaration of compliance will ensure compliance with the performance-based requirements of the FAA's final rule.

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

The final rule will require applicants who seek FAA acceptance of means of compliance and declarations of compliance to submit applications. In addition, holders of a declaration of compliance for small UAS in accordance with the requirements are required to label all small unmanned aircraft eligible to operate over people within two of the four categories the final rule permits for such operations. Lastly, for two of the four categories of aircraft eligible to operate over people, applicants who obtain an FAA-acceptance declaration of compliance will be required to make available, upon sale, transfer, or use by another person, remote pilot operating instructions that describe the small UAS and the declared category or categories of eligibility, describe permissible modifications that would not change the ability of the small UAS to meet the requirements for the applicable category or categories; and, if applicable, instruct operators on how to verify and change the mode or configuration of the small UAS.

### **a. Declaration of Compliance and Means of Compliance**

The FAA will collect information to enable the FAA to determine whether an applicant's submission of the declaration of compliance establishes the small UAS would be eligible for operations under either Category 2 or Category 3 of the final rule. This proposed information collection would also include record retention requirements applicable to manufacturers upon the FAA's acceptance of a declaration of compliance for a small UAS.

#### *Declarations of Compliance*

The Declaration of Compliance would be required to include the following information:

- (1) Applicant's name;
- (2) Applicant's physical address;
- (3) Applicant's email address;
- (4) The small unmanned aircraft system make and model name, and series, if applicable;

- (5) The small unmanned aircraft system serial number or range of serial numbers that are the subject of the Declaration of Compliance;
- (6) Whether the Declaration of Compliance is an initial declaration or an amended declaration;
- (7) If the Declaration of Compliance is an amended declaration, the reason for the re-submittal;
- (8) A declaration that the applicant:
  - (i) Has demonstrated that the small unmanned aircraft, or specific configurations of that aircraft, satisfies § 107.120(a)(1) and § 107.120(a)(2), or § 107.130(a)(1) and §107.130(a)(2) or both, through an accepted means of compliance;
  - (ii) Has verified that the unmanned aircraft system does not contain any safety defects identified by the Administrator.
  - (iii) Has satisfied § 107.120(d) or § 107.130 (d), or both; and
  - (iv) Will, upon request, allow the Administrator to inspect its facilities, technical data, and any manufactured small unmanned aircraft system and witness any tests necessary to determine compliance with this subpart; and
- (9) Other information as required by the Administrator.

The holder of an FAA-accepted declaration of compliance must store the detailed description of the means of compliance, including any substantiating material, until the later of either two years after the cessation of production of the small unmanned aircraft system(s) or the submission of the declaration of compliance to support the declaration of compliance. In addition, the person who holds the declaration of compliance must retain any accompanying data containing detailed information on the type of means of compliance on which the declaration of compliance would be based, and the results or justification used to demonstrate the small UAS meets the applicable performance-based requirements to establish eligibility.

#### *Means of Compliance*

Each declaration of compliance must identify the FAA-accepted means of compliance the applicant has used. Any applicant may apply to the FAA for acceptance of a means of compliance. Such applications must include a detailed description of the means of compliance and justification, including any substantiating material, showing the means of compliance establishes achievement of the safety requirements identified for small UAS eligibility pursuant to Category 2 or Category 3. The means of compliance must demonstrate the achievement of the safety requirements through test, analysis, or inspection that the small UAS is eligible for operations pursuant to Category 2 and/or Category 3.

All FAA-accepted means of compliance used to satisfy the performance-based requirements for eligibility must be stored for as long as the means of compliance is accepted by the FAA. If the means of compliance involved testing, the accompanying data or information must describe the test analysis or inspection procedures that outline the test methodology, as well

as justification showing the means of compliance establishes achievement of the safety requirements identified in the performance-based requirements.

The FAA will use the applicant's declaration of compliance and means of compliance to determine whether to accept the declaration or means of compliance. This review of information to decide acceptability is a critical component of the final rule, as it is the mechanism for FAA oversight to ensure compliance with the standards.

The final rule applies to any applicant who seeks acceptance of a means of compliance. It would also apply to any applicant who seeks acceptance of a declaration of compliance. While many applicants who seek acceptance of means of compliance may also seek to produce the small UAS and submit a declaration of compliance, the proposed rule would permit an applicant who seeks acceptance of a means of compliance to be distinct from the applicant who seeks acceptance of a declaration of compliance.

#### **b. Labeling**

Given that a small UAS could be qualified to conduct more than one category of operations, the final rule requires an applicant to label the small UAS to indicate each category of operations the small UAS is qualified to conduct. For example, a small UAS qualified to conduct Category 2 operations may also be qualified to conduct Category 3 operations. The holder of a declaration of compliance would label such a small UAS with each category, as follows: "Cat. 2, 3" or "Category 2, 3". The label could be painted onto, etched into, or affixed to the aircraft by some other permanent means.

The labeling requirement will assist the remote pilot to know what category of operations his or her small UAS is eligible to conduct, and accordingly, provide awareness of any technical and operational limitations that apply to the operations. The labeling requirement will also assist the FAA in its oversight role because it will provide an efficient means for an inspector to evaluate whether an operation is consistent with the category or categories of operation the small UAS may conduct. Additionally, the labeling requirement will assist law enforcement agencies to determine whether an operation is consistent with the safety requirements of the regulation. Because Category 3 operations entail unique operating limitations, the label on small unmanned aircraft eligible to conduct Category 3 operations will indicate to the remote pilot that he or she must adhere to the applicable operating limitations.<sup>2</sup> If a Category 2 or 3 label affixed to a small unmanned aircraft is damaged or destroyed such that it is no longer legible, a remote pilot in command must relabel the aircraft in English such that the label is legible, prominent, and will remain on the small unmanned aircraft for the duration of the operation before conducting operations over human beings. The label must correctly identify the category or categories of operation over human beings that the small unmanned aircraft is qualified to conduct in accordance with this subpart.

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<sup>2</sup> The labeling requirement this rule proposes is not the sole means by which a remote pilot in command will be aware of the operating limitations applicable to Category 3 operations. Remote pilots in command must maintain awareness of updated regulations, as required by §§ 107.73(a) and 107.74(a).

### **c. Remote Pilot Operating Instructions**

The information collection will also include information dissemination in the form of remote pilot operating instructions for small UAS that are eligible to operate over people. As noted above, the remote pilot operating instructions must address, at a minimum:

- A system description that includes the required small UAS components, any system limitations, and the declared category or categories of operation;
- Modifications that will not change the ability of the small UAS to meet the requirements for the category or categories of operation the small UAS is eligible to conduct, and
- Instructions for how to verify and change the mode or configuration of the small UAS, if they are variable.

In order to operate a small UAS safely over people or over moving vehicles, the remote pilot will be responsible for knowing what category of operations his or her small UAS is eligible to conduct. The final rule requires the holder of an FAA-accepted declaration of compliance for a small UAS to establish and maintain a product support and notification process to notify the public and the FAA of any defect or condition that would affect the eligibility of the small UAS to operate over people. Accordingly, the final rule requires holders of an FAA-accepted declaration of compliance to provide remote pilot operating instructions with product-specific information.

The final rule requires the provision of these remote pilot operating instructions at the time of sale, transfer, or use of the aircraft by someone other than the applicant who submitted a declaration of compliance. In addition, the final rule requires the holder of an FAA-accepted declaration of compliance ensure instructions remain up-to-date to account for any changes the holder of the FAA-accepted declaration of compliance might make to the small UAS. The final rule does not require the holder of an FAA-accepted declaration of compliance to provide remote pilot operating instructions in a particular format. Holders of an FAA-accepted declaration of compliance could include the operating instructions as part of the packaging of the small UAS, make them available electronically, or provide them in some other manner.

### **3. Extent of automated information collection.**

The FAA will provide a sample declaration of compliance in a fillable form. However, the FAA will not require an applicant who seeks acceptance of a declaration of compliance to use the form. The FAA will review declarations of compliance to ensure the applicant has satisfied the eligibility, safety requirements in accordance with the part 107 rule using an FAA-accepted means of compliance. The FAA's review of a means of compliance will not lend itself to an

automated review process, because each means of compliance will likely be based on unique, commercially valuable information.

The requirements for labeling and providing remote pilot operating instructions consist of requirements regarding display of information and recordkeeping, rather than submission of information. As a result, the opportunity for automated collection could not exist for such information.

#### **4. Efforts to identify duplication.**

DOT has carefully analyzed existing information collection activities to ensure the collection of information does not duplicate any other information collection in which the agency engages. Neither DOT nor the FAA presently collects information from small UAS manufacturers for complying with any other rule regarding operations of small UAS. As a result, the information collection does not entail any duplicative information collection requirements.

#### **5. Efforts to minimize the burden on small businesses.**

The information collection will involve only the information that is necessary to ensure compliance with the proposed performance-based requirements. In addition, the information collection requirements apply only to applicants who seek acceptance for two of the four proposed categories of eligibility for operations over people.

#### **6. Impact of less frequent collection of information.**

The information collection does not affect any Federal program or policy activities. This ICR does not impose periodic or routine reporting or recordkeeping activities, so this question is not applicable.

#### **7. Special circumstances.**

There are no special circumstances.

#### **8. Compliance with 5 CFR 1320.8.**

The information collection activity will be the agency's final notification of the proposed collection, as stated in the final rule, published on January 15, 2021 (86 FR 4314).

**9. Payments or gifts to respondents.**

No provision or payments or gifts to respondents in exchange for submitting the information would occur.

**10. Assurance of confidentiality.**

While no assurance of confidentiality to respondents would occur concerning the information respondents would submit in accordance with the proposed rule, the FAA would exercise care in handling any information that a submitter designates as proprietary. As stated in the Notice of Proposed Rulemaking, the FAA anticipates posting notices of availability to indicate the FAA's acceptance of means of compliance. In addition, the FAA may elect to post declarations of compliance online. However, the information that accompanies each application seeking FAA acceptance may consist of information that is commercially valuable. The agency does not intend to make such accompanying information available to the public.

**11. Justification for collection of sensitive information.**

DOT will not request information of a sensitive nature from any respondent.

**12. Estimate of burden hours for information requested.**

*Declaration of Compliance and Means of Compliance*

The final rule requires the manufacturers of small UAS to provide a declaration of compliance to the FAA. Using the FAA small UAS aircraft registry, for the limited purpose of estimating the information collection burden associated with the FAA's final rule, the agency assumes that the top 31 small UAS models weighing 11.68 pounds or less might be able to meet the requirements of the rule. The agency assumes each of the manufacturers would apply for acceptance of a declaration of compliance. Similarly, DOT also assumes that in each subsequent year, manufacturers would introduce a comparable number of models that could also be subject to obtaining a declaration of compliance. DOT estimates that approximately five percent of documents initially submitted to the FAA would not be accepted until reworked and resubmitted by the applicant. In Year 1, the annual hourly burden equals the number of documents submitted (32.55) multiplied by the number of pages (50 pages), and lastly multiplied by the hours per page (one hour). The following table shows the total annual hourly burden estimated for the means of compliance and declaration of compliance.



**Table 1: Annual Hourly Burden for Means of Compliance  
and Declaration of Compliance**

Year	Initial Submissions	Resubmissions	Pages Per Submission	Average Hours Per Page	Total Hours
1	31	1.55	50	1	1,628
2	8	0.4	50	1	420
3	8	0.4	50	1	420
Total	47	2.35	50	1	2,468
Annual Average	16	1	50	1	850

Row and column totals may not sum due to rounding.

FAA estimates the number of responses to total 49.35 over the three-year period, for an hourly burden totaling 2,468 over the same three-year timeframe. The annual average, including rounding, is 850 hours.

*Remote Pilot Operating Instructions*

The final rule requires the holders of a declaration of compliance to provide remote pilot operating instructions (RPOI). For a simple small UAS with no approved modifications or alternate configurations, the RPOI could be as few as two pages. For a more complex small UAS, we estimate the RPOI could be up to 10 pages. Each page could take the manufacturer between 10 and 40 hours to draft.<sup>3</sup> For this analysis, the FAA uses an average of six pages ( $[2 + 10] / 2 = 6$ ) and an average of 25 hours per page ( $(10 + 40) / 2 = 25$ ).

**Table 2: Annual Hourly Burden Estimates for Remote Pilot Operating Instructions**

Year	Operating Instructions	Pages	Hours Per Page	Hourly Burden
1	31	6	25	4,650
2	8	6	25	1,200
3	8	6	25	1,200
Total	47	6	25	7,050
Annual Average	16	6	25	2,400

Row and column totals may not sum due to rounding.

FAA estimates the number of responses to total 47 over the three-year period, for an hourly burden totaling 7,050 hours over the same three-year period.

<sup>3</sup> The range in time of 10 to 40 hours is inclusive of all activities required to draft and review the remote pilot operating instructions.

### *Labeling of Small Unmanned Aircraft*

The final rule requires a holder of an FAA-accepted declaration of compliance to label the small UAS with each category of operations the small UAS is qualified to conduct. Some small UAS could be qualified to conduct more than one category of operation. For example, a small UAS qualified to conduct Category 2 operations may also be qualified to conduct Category 3 operations; in such a case, the label on the small unmanned aircraft would list both Category 2 and Category 3. The label could be painted onto, etched into, or affixed to the aircraft by some other permanent means. A manufacturer would likely redesign an existing label already affixed to the aircraft, and that the label redesign would take a maximum of two hours.

**Table 3: Annual Burden Estimates for Labeling Unmanned Aircraft (Hours)**

Year	Number of Platforms	Hours Per Redesign	Hourly Burden
1	31	2	62
2	8	2	16
3	8	2	16
<b>Total</b>	47		<b>94</b>
<b>Annual Average</b>	16	2	<b>32</b>

Row and column totals may not sum due to rounding.

FAA estimates the number of respondents to total 47 over the three-year period, for an hourly burden totaling 94 hours over the same three-year period.

### *Declaration of Compliance and Means of Compliance*

The annual cost burden for the applicants to complete the declaration of compliance equals the number pages per submission multiplied by the hours per page, multiplied by a fully-burdened hourly wage of \$96.92. The cost is approximately \$157,730 in year 1, and \$42,645 in each of years 2 and 3, for the small UAS manufacturers to submit their declarations. Over the 3-year analysis period, the total cost is approximately \$243,027 in 2020 dollars.

**Table 4: Annual Burden and Cost for Means of Compliance and Declaration of Compliance**

Year	Initial Submissions	Resubmissions	Pages Per Submission	Average Hours Per Page	Total Hours	Total Cost
1	31	1.55	50	1	1,628	\$157,737
2	8	0.4	50	1	420	\$40,706
3	8	0.4	50	1	420	\$40,706
<b>Total</b>	47	2.35	50	1	2,468	\$230,150

Row and column totals may not sum due to rounding.

*Remote Pilot Operating Instructions*

For applicants to develop and maintain remote pilot operating instructions, a fully-burdened hourly wage of \$96.92<sup>4</sup> is multiplied by the total hourly burden of 7,050 hours for total cost of approximately \$683,300.

**Table 5: Annual Burden Estimates for Remote Pilot Operating Instructions**

Year	Operating Instructions	Pages	Hours Per Page	Hourly Burden	Total Cost
1	31	6	25	4,650	\$450,678
2	8	6	25	1,200	\$116,304
3	8	6	25	1,200	\$116,304
<b>Total</b>	<b>47</b>	<b>6</b>	<b>25</b>	<b>7,050</b>	<b>\$683,286</b>

Row and column totals may not sum due to rounding.

*Labeling of Unmanned Aircraft*

A manufacturer would likely redesign a label already affixed to the aircraft, which would take a maximum of approximately two hours at a fully-burdened hourly wage of \$96.92<sup>5</sup> for an annual cost of \$6,009 in year 1, and \$1,551 in each of years 2 and 3. Over the 3-year analysis period, the total cost is approximately \$9,110.

**Table 6: Annual Burden Estimates for Labeling Unmanned Aircraft (Hours)**

Year	Number of Platforms	Hours Per Redesign	Hourly Burden	Total Cost
1	31	2	62	\$6,009
2	8	2	16	\$1,551
3	8	2	16	\$1,551
<b>Total</b>	<b>47</b>		<b>94</b>	<b>\$9,110</b>

Row and column totals may not sum due to rounding.

*Total Economic and Time Burden*

**Table 7: Total Annual Burdens**

IC	Number of Submissions	Time Per Submission	Total Hours	Total Cost
DOC/	17	50	850	\$76,717

<sup>4</sup> Based on the Regulatory Evaluation for the final rule titled “Operation of Small Unmanned Aircraft Systems over People”, the FAA assumes a technical expert performing this level of work in the private sector would earn an amount equivalent to that of an FAA Technical Subject Matter Expert at “J” Pay Band hourly wage. The fully burdened wage is \$96.92 (in 2020 dollars).

<sup>5</sup> See footnote 4.

IC	Number of Submissions	Time Per Submission	Total Hours	Total Cost
MOC				
RPOI	16	150	2,400	\$232,608
Labeling	16	2	32	\$3,037
<b>Total</b>	<b>49</b>	<b>202</b>	<b>3,282</b>	<b>\$106,030</b>

Row and column totals may not sum due to rounding.

### **13. Estimate of total annual costs to respondents.**

There are no additional start-up costs associated with this collection not already included in item number 12.

### **14. Estimate of cost to the Federal government.**

The agency estimates the number of hours for the agency to review the declaration of compliance and means of compliance and notify an applicant as to whether the means of compliance or declaration of compliance has been accepted to be three hours. The hourly wage for a FAA subject matter expert to review the submission is a fully-burdened hourly wage of \$103.77 per hour<sup>6</sup> for an annual cost of \$10,133 in year 1, and \$2,615 in each of years 2 and 3. The total FAA cost over the three-year analysis period is \$15,363, for an annual average FAA cost of \$5,121.

**Table 7: Annual Hourly Burden and Cost for FAA Review of Manufacturer Means of Compliance and Declaration of Compliance**

Year	Initial Submissions	Resubmissions	Average FAA Review Time (Hours)	Total Hours	Total Cost
1	31	1.55	3	97.65	\$10,133
2	8	0.4	3	25.20	\$2,615
3	8	0.4	3	25.20	\$2,615
Total	47	2.35	3	148.05	\$15,363

Row and column totals may not sum due to rounding.

The agency does not expect to incur any costs related to the labeling of the small unmanned aircraft eligible for operations over people or regarding the requirement for manufacturers to provide remote pilot operating instructions. Declarations of compliance will request a statement in which manufacturers affirm the small UAS will be subject to remote pilot operating

<sup>6</sup> Based on the analysis in Regulatory Evaluation of proposed rule titled “Operation of Small Unmanned Aircraft Systems over People”, an FAA Technical Subject Matter Expert performing this review would earn an upper-bound “J” Pay Band hourly wage of \$72.91 (in 2017 dollars).

instructions. The above estimate for reviewing declarations of compliance reflects the FAA's review of this required statement.

**15. Explanation of program changes or adjustments.**

DOT proposes to collect this information in accordance with its final rule to permit operations of small UAS over people. The FAA would use the information it collects to ensure compliance with the performance-based requirements of the proposed rule. No current program that would collect such information exists.

**16. Publication of results of data collection.**

No requirement exists that will obligate DOT to publish for statistical use any information collected in accordance with this collection. The final rule, however, notifies the public of the FAA's intent to post notices of availability indicating the FAA's acceptance of means of compliance. The FAA also intends to post declarations of compliance online. However, the FAA does not intend to post the information on which these decisions of acceptance are based.

**17. Approval for not displaying the expiration date of OMB approval.**

DOT does not seek approval to refrain from displaying the expiration date of OMB approval of this proposed information collection.

**18. Exceptions to certification statement.**

DOT has not identified any exceptions in Item 19, OMB Form 83-I.