## **Supporting Statement**

Certification: Pilots, Flight Instructors, and Ground Instructors

OMB 2120-0021

**Note:** This supporting statement revises the information collection OMB pre-approved August 12, 2016 regarding revisions made as part of the Operation and Certification of Small Unmanned Aircraft Systems.

#### **Justification:**

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

Title 49, United States Code, Section 44703 specifically empowers the Secretary of Transportation to issue airman certificates to properly qualified persons. This clearance request covers the burden imposed on airmen directly responsible for the control of aircraft. Each certificate issued specifies the capacity in which the holder is authorized to serve as an airman in connection with the operation of an aircraft.

Title 14 of the Code of Federal Regulations part 61 (14 CFR part 61) Certification: Pilots, Flight Instructors, and Ground Instructors prescribes minimum standards and requirements for the issuance of airman certificates, and establishes procedures for applying for airman certificates.

Subpart C of title 14 CFR part 107, Small Unmanned Aircraft Systems, provides requirements for applicants to obtain a remote pilot certificate, and establishes procedures for applicants to apply for such certificates.

This collection follows the strategic goal of safety.

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

For persons applying for an airman certificate under part 61, the Airman certificate and/or Rating Application form and the required records, logbooks and statements required by the federal regulations are submitted to Federal Aviation Administration (FAA) Flight Standards District Offices or its representatives to determine qualifications of the applicant for issuance of a pilot or instructor certificate, or rating or authorization.

As of December 31, 2009, there were approximately 700,000 active certificated pilot airmen. This includes student, private, commercial, airline transport pilot certificate holders, as well as ground and flight instructors. Approximately 25% of these pilots are providing data on an annual basis. Instructor certificates must be renewed every 24 months to remain effective.

Applicants for the various general aviation pilot, ground, and flight instructor certificates are required to submit a completed FAA Form 8710-1, Airman Certificate and/or Rating Application. If the information collection was not conducted, the FAA would be unable to issue the appropriate certificates and ratings.

For persons applying for a remote pilot certificate with a small UAS rating under part 107, the Remote Pilot Certificate and/or Rating Application is used. For applicants who do not hold a pilot certificate under part 61, the Remote Pilot Certificate and/or Rating Application is submitted along with a documentation demonstrating that the applicant passed an aeronautical knowledge test. For applicants who hold a pilot certificate under part 61 and meet the flight review requirements of § 61.56, the Remote Pilot Certificate and/or Rating Application is submitted with evidence of completion of the training course.

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 or information technology, e.g. permitting electronic submission of responses, and the basis for the decision for adopting this means of collection.

The FAA has an electronic data collection system called the Integrated Airman Certification and Rating Application (IACRA). IACRA is a secure web-based application that uses online validation and digital signatures to complete the airman certification documents. IACRA interfaces with multiple FAA databases such as knowledge testing and airman records for data validation and verification. It automatically ensures that applicants meet regulatory and policy requirements.

IACRA improves the airman certification process by checking for data errors that cause rejected applications. The certification processing time is reduced since the applicant, recommending instructor (if required), and inspector/examiner can complete the airman application online and can submit the completed application electronically using digital signatures. OMB has used IACRA as an example of FAA's compliance with the Government Paperwork Elimination Act.

The FAA had made the use of IACRA mandatory by its inspectors and designated pilot examiners. The FAA expects that pilot airman certification application process will soon be an almost paperless process with few exceptions. Though the use of IACRA will not reduce the time it takes for an applicant to complete and submit the information required by the 8710-1 form versus its paper version, IACRA will eventually serve reduce the FAA's clerical review time.

#### 4. Describe efforts to identify duplication.

We have reviewed other FAA public-use reports and find no duplication. Also, we know of no other agency collecting information from pilots and flight instructors prescribing the terms, conditions, and limitations of their operating certificates. This information is required under Part 61 of the federal regulations.

5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-1), describe any methods used to minimize burden.

Reporting and record keeping requirements of Part 61 and Part 107, Subpart C of the Federal Aviation Regulations pertain to individual applicants for a pilot certificate and not to business organizations.

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.

For the most part, the applicants who submit certification applications determine the frequency of information collection. The applicant, not the FAA, governs a decrease in the frequency of collection unless safety dictates otherwise (i.e. numerous violations of the federal regulations).

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

This information collection is conducted in a manner consistent with 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 record keeping, disclosure, or reporting format (if any) and the data elements to be recorded, disclosed, or reported.

The FAA has proposed revising this information collection as part of its Operation of Small Unmanned Aircraft Systems over People notice of proposed rulemaking (RIN 2120-AK85). The FAA will respond to any comments it receives regarding this information collection in a subsequent final rule.

9. Describe any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

Respondents are provided no payment or gift in connection with the information collection burden.

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

The information collected will become part of the Privacy Act system of records DOT/FAA 847, General Aviation Records on Individuals and afforded the protection offered under the Privacy Act and that particular system.

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.

The Airman Certificate and/or Rating Application requires the applicant to respond to questions concerning a conviction under Federal or State statutes pertaining to narcotic drugs, marijuana, and/or stimulant drugs or substances. This information is necessary to determine whether the applicant is in compliance with appropriate 14 CFR part 61 or 14 CFR part 107 certification requirements.

12. Provide estimates of the hour burden of the collection of information. The statements should: Indicate the number of respondents, frequency of response, annual hour burden and an explanation of how the burden was estimated. If this request for approval covers more than one form, provide separate hour burden estimates for each form.

Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.

A section-by-section breakdown of the applicable sections of 14 CFR part 61 and the applicable sections of part 107 is listed below, showing the number of respondents, frequency of response, annual hour burden, and how the burden has been estimated.

Section 61.13, Application and Qualification – As indicated (in Item #2 of this report), applicants for a pilot certificate and/or flight instructor certificate must submit FAA Form 8710-1 to the FAA or its representatives to determine qualifications of the applicant for issuance of a pilot or flight instructor certificate, or rating or authorization. We continue to estimate 100,000 new applications for pilots and/or flight instructor certificates at 0.1 hours each.

 $\underline{100,000}$  new applications for pilot/instructor certificates at  $\underline{0.1}$  hours each =  $\underline{10,000}$  hours

Section 61.39, Prerequisites for flight tests – states that to be eligible for a practical test for a certificate or rating, an applicant must present a written statement from an authorized flight instructor. The statement must certify that the applicant has received specified instruction and has shown competency for the rating sought. We estimate 100,000 applicants are annually subject to this requirement. Practical tests are not required for ground instructor certificates and ratings. Flight instructor written statements are 100,000 annually at .05 hours each.

<u>100,000</u> applicants x <u>.05</u> hours each = <u>5,000</u> hours

<u>Section 61.49 retesting after failure</u> – The numbers and hours required for reporting required by this section are included in the numbers for sections 61.13. The flight instructor statements required by this section for reapplication for original airmen certificates are about 2,200 individual applicants annually at .05 hours each. Reapplication for pilot certificates after failure is estimated to be 11,400 at .05 hours each.

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2,200 statements x .05 hours each = 110 hours 11,400 statements x .05 hours each = 570 hours Total = 680 hours
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<u>Section 61.51, Pilot logbooks</u> – requires pilots to enter flight time that is to be credited toward experience or training requirements for certificates or ratings in a reliable record. We estimate that of the total active certificated pilot population (700,000), 190,000 pilots must log flight time annually to meet this requirement at a total average of 1.0 hours each for entering the required records.

190,000 pilots x  $\underline{1.0}$  hours each =  $\underline{190,000}$  hours

<u>Section 61.56(a)</u>, <u>Flight Review</u> – Provides that except for certain exceptions for pilots required under other operating rules to have periodic proficiency checks, and certified flight instructors who pass a practical test for the issuance or renewal of a certificate, or the addition of a rating, each pilot who exercises pilot-in-command privileges must have completed a flight review within the previous 24 months. The pilot must maintain an endorsement of satisfactory completion in a logbook. We estimate that, of the total active pilot population of 700,000, some 190,000 pilots complete a flight review per year with an average time of 0.1 hours each necessary for the flight instructor to record the flight review.

 $181,839 \text{ pilots } \times 0.1 \text{ hour each} = 18,184 \text{ hours}$ 

<u>Section 61.57, Pilot-in-Command</u> – Recent flight experience: Pilot-in-command provides that except for certain exceptions, no person may act as pilot-in-command of an aircraft carrying passengers or of an aircraft certificated for more than one pilot flight crewmember unless that person is current in accordance with the requirements of section 61.57. We estimate that 290,000 pilots are subject to these recordkeeping requirements at an average of 0.1 hours each.

290,000 pilots x 0.1 hour each = 29,000 hours

<u>Section 61.63</u>, <u>Additional Aircraft Ratings</u> – provides authority for the addition of category, class, and type rating to an existing certificate. Recordkeeping requirements are included under Section 61.39.

<u>Section 61.85</u>, <u>Applications</u> – Applicants for an original student pilot certificate must submit FAA Form 8710-1 to the FAA or its representatives to determine qualifications of

the applicant for issuance of a student pilot certificate. We estimate 38,700 applications for new and replacement student pilot certificates are submitted annually, and FAA Form 8710-1 takes 0.5 hours to complete. Therefore, the student airman certification program imposes a 19,350 hours reporting burden per year. The following equation provides the basis for 19,350 hours.

38,700 applications for new and replacement student pilot certificates x = 0.5 hours = 19,350 hours

<u>Section 61.87</u>, <u>Requirements for Solo Flight</u> - Provides for endorsements by an authorized flight instructor on student pilot certificates and in student pilot logbooks for competency and currency. We estimate that 80,000 student pilots are annually subject to these recordkeeping requirements and that .05 hours is the average time required for record entries.

80,000 student pilots x .05 hour each = 4,000 hours

<u>Section 61.93, Cross-Country Flight Requirements (student pilot)</u> – Requires flight instructor endorsements in pilot logbooks certifying the competence for cross-country flight operations. We estimate that 80,000 student pilots will annually obtain these endorsements and that 0.1 hours are required for each student pilot.

<u>80,000</u> student pilots  $\times 0.1$  hours each = <u>8,000</u> hours

<u>Section 61.105</u>, <u>Aeronautical Knowledge</u> – Provides for the logging of specified ground instruction by trainees for private pilot certification. The number estimates are included under Section 61.51.

<u>Section 61.107</u>, <u>Flight Proficiency</u> – Provides for logging specified flight instruction for private pilot trainees. Number estimates are included under Section 61.51.

<u>Section 61.115, Glider Rating: Aeronautical Experience</u> – Requires logging of flight time required for the rating. Number estimates are included Section 61.51.

<u>Section 61.125</u>, <u>Aeronautical Knowledge</u> – Requires that applicants for commercial pilot certificates must log specified ground instruction or use other options. We estimate that 9,500 pilots annually use this option to meet aeronautical knowledge requirements and those average 0.2 hours each to log the instruction.

9,500 pilots x 0.2 hours each = 1,900 hours

<u>Section 61.127, Flight Proficiency</u> – Provides for logging specified flight instruction for commercial pilot certificate trainees. Number estimates are included under Section 61.51.

<u>Section 61.185</u>, <u>Aeronautical Knowledge</u> – Provides that applicants for flight instructor certificates must log specified ground instruction. We estimate that 5,800 pilots annually comply with this requirement and that they spend an average of 0.1 hour each making logbook entries for a combined total of 600 hours.

5,800 pilots x 0.1 hour each = 580 hours

<u>Section 61.187, Flight Proficiency</u> – Provides for logging specified flight instruction for applicants for a flight instructor certificate. Number estimates are included under Section 61.51.

<u>Section 61.189</u>, <u>Flight Instructor Records</u> – Requires each certificated flight instructor to sign the logbook of each pilot to whom he/she gives instruction, and to maintain a separate record of the instruction given to each pilot regarding solo flight as well as a record of knowledge/practical test endorsements. We estimate that 30,000 certificated flight instructors average 1.0 hour each complying with these recordkeeping requirements.

30,000 flight instructors x 1.0 hour each = 30,000 hours

<u>Section 61.197</u>, <u>Renewal of Flight Instructor Certificates</u> – States that holders of flight instructor certificates may have their certificates renewed for an additional period of 24 months providing they- 1) pass an appropriate practical test, 2) attend an approved flight instructor refresher clinic/course, 3) endorse at least 5 applicants to take the practical test in which at least 80% passed the first time, <u>or</u> 4) serve as an air carrier check airman or flight instructor in the previous 24 calendar months. FAA Form 8710-1 is used to support the application for renewal. We estimate that 40,000 flight instructors will annually apply for renewal.

40,000 8710-1 applications x <u>0.1</u> hour each = 4,000 hours

<u>Part 107, Subpart C, Remote Pilot Certification</u> – This section is revised to replace the requirement for a person to have passed a recurrent aeronautical knowledge test within the previous 24 months to operate a small UAS with the requirement to pass a recurrent training course. This change results in a net cost savings.

Section 107.61 provides the eligibility requirements for persons applying for a remote pilot certificate with a small UAS rating. To obtain it, the applicant will have to either: (1) take and pass an aeronautical knowledge test; or (2) for those part 61 pilots that have completed a flight review within the previous 24 months, take an on-line training course. Upon successful completion of either the aeronautical knowledge test or online training, the applicant will submit an application for the certificate. In order to maintain the privileges of the remote pilot certificate with a small UAS rating to all persons who hold that certificate, a recurrent training course is required every 24 months thereafter.

The FAA estimates for the low case scenario there are a total of 67,045 remote pilot applicants during Year 1 through Year 3, and for the high case remote pilot applicants total just under 1.6 million for the same 3-year period (includes those applicants that pass the initial knowledge test and those applicants that take recurrent training every 24 months thereafter.

The table below presents the activities and hour burdens for remote pilot testing and training. The proposed change will result in a net paperwork cost savings of \$0.8 million and \$23.8 million for the low case and high case, respectively. The net savings are attributed to the difference in time required for paperwork costs associated with knowledge testing versus on-line training

		Total Hours	
Requirement	Applicant time (hours)	Low Case	High Case
Application for Remote Pilot Certificate	0.25	29,421	395,942
Knowledge Test Application	0.25	29,360	367,477
Knowledge Test Exam Time	3.0	352,321	4,409,727
On-Line Training for Current Pt 61 Pilots	2.0	6,041	6,041
Create Account for On-Line Training	0.25	29,421	395,942
Initial and Recurrent Training for Non Part-61 Pilot Applicants	2.0	269,648	4,015,463
Airman Knowledge Test Report	0.25	29,360	367,477

## Summary

We estimate that the airman certification program imposes a 399,544 hours reporting and recordkeeping burden on the public (215,914 hours reporting and 287,344 hours recordkeeping). The total burden breaks down as follows:

#### Reporting burden:

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Section 61.13, Applications = 10,000 hours
Section 61.85, Applications for Student Pilot Certificates = 19,350 hours
Section 61.197, Renewal of Flight Instructor Certificates = 4,000 hours
Section 107.61, Eligibility for a remote pilot certificate with a small UAS rating = 78,850 hours
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# **Total Reporting Burden = 112,200 hours**

#### Recordkeeping burden:

Section 61.39, Prerequisites for flight tests	= 5,000 hours
Section 61.49, Retesting After Failure	= 680 hours
Section 61.51, Pilot Logbooks	= 190,000 hours
Section 61.56(a), Flight Review	= 18,184 hours
Section 61.57, Pilot-in-Command	= 29,000 hours

Section 61.87, Requirements for Solo Flights	=	4,000 hours
Section 61.93, Cross-Country Flight Requirements	=	8,000 hours
Section 61.125, Aeronautical Knowledge	=	1,900 hours
Section 61.185, Aeronautical Knowledge	=	580 hours
Section 61.189, Flight Instructor Records	= _	30,000 hours
Total Recordkeeping Burden	= 2	88,160 hours

Total Reporting Burden Hours

Total Recordkeeping Burden Hours

Total Combined Burden Hours

112,200 hours
+ 287,344 hours
= 399,544 hours

# **Annual Number of Responses**

The total number of annual responses for the airman certification program is estimated to be **1,196,653**.

# Reporting Responses:

Section 61.13, Applications	= 100,000
Section 61.85, Applications for Student Pilot (	Certificate = 38,700
Section 61.197, Renewal of Flight Instructor C	Certificates = $40,000$
Section 107.61: 39,229 annually	
Total Reporting	Responses = 217,929

# Recordkeeping Responses:

Section 61.39, Prerequisites for flight tests	= 100,000
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Section 61.49, Retesting After Failure	= 13,600
Section 61.51, Pilot Logbooks	= 190,000
Section 61.56(a), Flight Review	= 181,839
Section 61.57, Pilot-in-Command	= 290,000
Section 61.87, Requirements for Solo Flights	= 80,000
Section 61.93, Cross-Country Flight Requirements	= 80,000
Section 61.125, Aeronautical Knowledge	= 9,500
Section 61.185, Aeronautical Knowledge	= 5,800
Section 61.189, Flight Instructor Records	= 30,000
Total Recordkeeping Responses	= 980,739

# **Total Combined Responses** =1,159,439

# **Annual Number of Respondents**

The total number of respondents in the airman certification program is estimated to be approximately 25 percent of the population of active certificated pilots and instructors. Given a population of 825,000, the result is **206,250 respondents** providing data on an

annual basis. The total number of applicants for a remote pilot certificate with a small UAS rating is estimated to be 39,229 annually.

The estimated annual cost to respondents for the hour burdens resulting from the application requirements of the collection of information other than remote pilots with small UAS ratings is \$1,138,500. This cost is determined by estimating the time required for the applicants to complete and submit FAA Form 8710-1 applications. Even though the FAA is using the IACRA system, no significant change in time required to complete and submit this form will occur. We estimate that 138,000 forms are submitted for these certificates and ratings at an average preparation time of 15 minutes (0.25 hrs) each at an average of \$33 per hour, per applicant. The average time estimate of 0.25 hours assumes that many individual applicants will submit an 8710-1 form more than once for various reasons, and that most of the information provided on the form likely will not have changed.

**138,000** 8710-1 Applications **x 0.25** hours **x \$33** per hour = **\$1,138,500** 

For Part 107 we estimate that an average of 39,229 forms are submitted annually that require an average preparation time of 0.25 hours to complete at an average rate of \$29.21 per hour.

39,229 8710-13 Applications x 0.25 hours x \$29.03 per hour = \$284,706

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

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

14. Provide estimates of annualized cost to the Federal Government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses and any other expense that would not have been incurred without this collection of information.

Estimated annual cost to the Federal Government is \$1,380,000. This cost is determined by estimating the time required for FAA personnel to review and process FAA 8710-1 Airman Certificate and/or Rating Application forms. Even though the FAA has begun IACRA implementation, no significant change in the time required to review this form has occurred. We estimate that 138,000 forms are submitted for these certificates and ratings at an average file processing time by a clerical worker of 30 minutes (0.5) each at \$20 per hour.

**138,000** 8710-1 Applications **x 0.5** hours **x \$20** per hour = \$1,380,000

For Part 107 we estimate that an average of 39,229 forms are submitted annually which cost \$25 per hour to process.

**39,229** 8710-13 Applications **x** \$25 = \$980,725

For software updates, the federal government incurs an annualized cost of \$0.017 million at a 7% rate and a \$0.015 annualized cost at a 3% rate.

#### **Over Ten Years**

Total Software Update Costs					
Estima te	Total (millio ns)	PV at 7% (millio ns)	Annualiz ed at 7% (millions	PV at 3% (millio ns)	Annualiz ed at 3% (millions
Total	\$0.130	\$0.121	\$0.017	\$0.126	\$0.015

15. Explain the reasons for any program changes or adjustments reported in items 13 or 14 of the OMB Form 83-1.

This revision supports the Operation of Small Unmanned Aircraft Systems over People notice of proposed rulemaking. Specifically, this rule proposes to replace the recurrent inperson knowledge testing requirement with recurrent online training. This change would reduce the burden for persons completing recurrent online training.

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

There are no plans to publish this information for statistical or other purposes.

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

No such approval is being sought.

18. Explain each exception to the certification statement identified in item "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-1.

There are no exceptions to the certification statement.