U.S. Department of Transportation
Privacy Impact Assessment
Federal Aviation Administration
Small Unmanned Aircraft Systems Over People
Notice of Proposed Rulemaking

Responsible Official
Guido Hassig
Aviation Safety Inspector
(585) 436-3880
UAShelp@faa.gov

Reviewing Official
Claire W. Barrett
Chief Privacy & Information Asset Officer
Office of the Chief Information Officer
privacy@dot.gov
Executive Summary


What is a Privacy Impact Assessment?

The Privacy Act of 1974 articulates concepts for how the federal government should treat individuals and their information and imposes duties upon federal agencies regarding the collection, use, dissemination, and maintenance of personally identifiable information (PII). The E-Government Act of 2002, Section 208, establishes the requirement for agencies to conduct Privacy Impact Assessments (PIAs) for electronic information systems and collections. The assessment is a practical method for evaluating privacy in information systems and collections, and documenting assurance that privacy issues have been identified and adequately addressed. The PIA is an analysis of how information is handled to—i) ensure handling conforms to applicable legal, regulatory, and policy requirements regarding privacy; ii) determine the risks and effects of collecting, maintaining and disseminating information in identifiable form in an electronic information system; and iii) examine and evaluate protections and alternative processes for handling information to mitigate potential privacy risks.1

Conducting a PIA ensures compliance with laws and regulations governing privacy and demonstrates the DOT’s commitment to protect the privacy of any personal information we collect, store, retrieve, use and share. It is a comprehensive analysis of how the DOT’s electronic information systems and collections handle personally identifiable information (PII). The goals accomplished in completing a PIA include:

- Making informed policy and system design or procurement decisions. These decisions must be based on an understanding of privacy risk, and of options available for mitigating that risk;
- Accountability for privacy issues;
- Analyzing both technical and legal compliance with applicable privacy law and regulations, as well as accepted privacy policy; and
- Providing documentation on the flow of personal information and information requirements within DOT systems.

Upon reviewing the PIA, you should have a broad understanding of the risks and potential effects associated with the Department activities, processes, and systems described and approaches taken to mitigate any potential privacy risks.

1Office of Management and Budget’s (OMB) definition of the PIA taken from guidance on implementing the privacy provisions of the E-Government Act of 2002 (see OMB memo of M-03-22 dated September 26, 2003).
**Introduction & NPRM Overview**

In the FAA Modernization and Reform Act of 2012 (Public Law 112-95), Congress mandated that the Department of Transportation (DOT) conduct a suite of rulemakings to integrate small UAS into the National Airspace System (NAS). In response to this statutory mandate, the FAA has published a notice of proposed rulemaking (NPRM), designed to allow low-risk small UAS operations over people. The proposal, a new subpart to Title 14 Code of Federal Regulations (14 CFR) part 107, addresses the standards that would govern the eligibility of small UAS to operate over people. In 2019, under updated statutory authority, the FAA published the proposed rule. The NPRM proposes a new subpart to part 107, which would permit operations of small UAS over human beings without the need to obtain a waiver. This proposal represents the next phase of integrating small UAS operations in the NAS by allowing operations over people under part 107.

Specifically, this proposal creates a documentation requirement for manufacturers that construct small UAS eligible for certain operations over human beings. Any person who designs, produces, or modifies a small UAS with the purpose of establishing eligibility for the small UAS to operate over people would submit a Declaration of Compliance to the FAA that, among other things, would assert compliance with the performance based requirements of the proposal. The process for submitting this Declaration of Compliance and the FAA acceptance of the document is analogous to the process currently used for certain certification activities for manned aircraft. Thus, the privacy implications of the information collection, maintenance, storage, and dissemination by the FAA in accordance with this proposal are also similar to those of the FAA’s current aircraft certification processes. However, where FAA’s current aircraft certification process involves collection of PII only from manufacturing companies, UAS manufacturers could foreseeably consist of both manufacturing companies and individuals who are members of the public.

The FAA notes that some members of the public have raised privacy concerns related to the operational use of unmanned aircraft for unauthorized surveillance and data collection. While addressing these types of concerns is beyond the scope of the proposed rule associated with this assessment, the FAA has engaged with stakeholders on general privacy issues surrounding UAS operations. In particular, the FAA participated in the multi-stakeholder engagement process led by the National Telecommunications and Information Administration (NTIA), established by the Presidential Memorandum, Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems (February 15, 2015). As a result of this multi-stakeholder process, NTIA published “Voluntary Best Practices for UAS Privacy, Transparency, and Accountability.” The FAA has added information about this guide to the part 107 training course and guidance material that FAA is providing for new remote pilots. The FAA also notes that certain federal, state, local, and common law protections of individual privacy also exist. Such protections may provide recourse for any potential invasion of personal privacy that might result from third party use of a UAS. The FAA training course and guidance materials advise remote pilots to check their state and local privacy laws prior to flight.

The following are examples of possible small UAS operations that could occur under this proposed framework without first clearing people from the area in which the small UAS will operate; however, the list is not exhaustive. Possible uses include:

- Motion picture filming;
- Newsgathering;
- Search and rescue of missing persons;
- Law enforcement, crowd control;
- Fire department operations;
- Homeland security operations;
- Personal aerial photography;
- Aerial sports photography;
- Crop monitoring/inspection;
- Research and development;
- Educational/academic uses;
- Power-line/pipeline inspection;
- Antenna inspections;
- Bridge inspections;
- Construction/surveying;
- Aiding certain rescue operations; and
- Insurance underwriting and adjusting claims.

In particular, the proposed rule would establish three categories for operations of small UAS to occur over people. Two of the three categories would involve the collection of information to determine the eligibility of the small UAS to operate over people.

First, under an existing Final Rule, Operation and Certification of Small Unmanned Aircraft Systems, 81 FR 42063, there is a recurrent knowledge testing requirement: “an applicant for a remote pilot certificate with small UAS rating is not required to pass a practical test; knowledge testing is the only way for the FAA to determine that a remote pilot has the requisite aeronautical knowledge to operate safely in the NAS.” (page 42170)

Upon further review of the knowledge testing and training requirements in current part 107, the FAA proposes revising the requirements. Specifically, the proposed rule would remove the recurrent testing requirement and replace it with a recurrent online training requirement. Holders of remote pilot certificates would be required to complete an online training course every 24 months to maintain privileges of the certificate. The proposal does not impose any additional airman certification requirements that are not already addressed in the Small UAS Final Rule PIA available at https://www.transportation.gov/privacy.

The proposed rule would also permit operations of small UAS at night. Currently, part 107 prohibits all small UAS operations from operating at night, unless the person conducting the operation holds a waiver to permit it. The proposed rule would allow nighttime operations if the remote pilot conducting the operation has completed updated training or an updated version of the initial knowledge test, and the small unmanned aircraft has an illuminated anti-collision light that is visible for three statute miles. To be eligible for night operations, remote pilots would provide the same personally identifiable information as they currently do to identify themselves for completion of the test or training.

Lastly, the proposed rule would require remote pilots to present their remote pilot certificate as well as identification to certain Federal, State, or local officials, upon request. Such identification would be the same type of identification the remote pilot used to validate his or her identity when applying for a remote pilot certificate. This amendment would ensure consistency between part 107 and the existing requirement codified in 14 CFR part 61, which applies to holders of other types of airmen certificates.
This PIA focuses on the two components of the FAA’s proposal that involve the possible collection and use of PII related to operations over people: (1) the Declaration of Compliance and (2) submission of a custom means of compliance.

(1) Declaration of Compliance

The FAA proposes that a manufacturer declare compliance with the standards that establish the safety level for operating over people using a Declaration of Compliance. The applicable standards address both a maximum impact kinetic energy potential and exposed rotating parts to determine whether the aircraft are eligible to conduct certain operations. This Declaration and related documents that a manufacturer or other entity uses to establish compliance may include PII.

Submission of the Declaration

Under the proposed rule, the Declaration of Compliance would be an electronic form available on the FAA’s website. An applicant who is interested in marketing small UAS that are eligible for certain operations over people would submit a Declaration of Compliance to the FAA, request the FAA’s acceptance of the Declaration, and receive the FAA’s acceptance, prior to labeling the small UAS as eligible for operations over people. A completed Declaration of Compliance would include information required by the Administrator for determining whether a small UAS complies with the applicable standard, and to track those models of small UAS that are compliant with the standard. The DOT and FAA remain uncertain of precisely what information the agency will ultimately collect in connection with the Declarations of Compliance. Under the proposed rule, in addition to a Declaration of Compliance, the person who submits the Declaration of Compliance would identify the means of compliance used, in addition to the following: the name of the applicant; the physical address of the applicant; the email address of the applicant; the serial number or range of serial numbers, make, and model name of any small UAS to be certified. This information would provide a tracking mechanism by which the FAA and the public would be able to determine which makes and models are eligible to conduct certain operations over people.

An applicant would provide, on their Declaration of Compliance, whether he or she used an FAA-accepted means of compliance or a custom means of compliance. Applicants would only label small UAS for certain operations after the manufacturer has received notification from the FAA that the Declaration of Compliance had been accepted. Once the FAA accepts a Declaration of Compliance, the FAA would add to its website the make/model of the UAS as eligible for operations over people.

The FAA would use a web-based platform to collect the submitted information, including the Declaration of Compliance and custom means of compliance. PII collected by the FAA for compliance purposes would be maintained in accordance with the Privacy Act. The FAA may also use a paper-based alternative to the web-based platform.

(2) Submission of a Custom Means of Compliance

The proposed rule would permit applicants to provide custom means to comply with the standards for limiting injury levels. This standard is based on both impact kinetic energy and exposed rotating parts limitations of eligible aircraft. Applicants would submit information to the FAA for review and acceptance of the custom means of compliance.

When seeking acceptance of a custom means of compliance, an applicant must propose their means of compliance to the local Aircraft Certification Office or to the UAS Integration Office. The DOT and FAA remain uncertain of precisely what information the agency will ultimately collect in connection with custom means of compliance; however, the request will likely be required to include the applicant’s
name, mailing address, telephone number, and email address; alternate test procedure that outlines the test methodology; procedures and details; an engineering analysis to support the equivalency of the custom means of compliance testing to the safety level identified in the rule; and substantiating data that supports the test, methods, results and conclusions. The FAA will evaluate the alternate testing procedure and supporting documents on a case-by-case basis.

Fair Information Practice Principles (FIPPs) Analysis

The DOT PIA template is based on the Fair Information Practice Principles (FIPPs). The FIPPs, rooted in the tenets of the Privacy Act, are mirrored in the laws of many U.S. states, as well as many foreign nations and international organizations. The FIPPs provide a framework that will support DOT efforts to appropriately identify and mitigate privacy risk. The FIPPs-based analysis conducted by DOT is predicated on the privacy control families articulated in the Federal Enterprise Architecture Security and Privacy Profile (FEA-SPP) v3, sponsored by the National Institute of Standards and Technology (NIST), the Office of Management and Budget (OMB), and the Federal Chief Information Officers Council and the Privacy Controls articulated in Appendix J of the NIST Special Publication 800-53, Security and Privacy Controls for Federal Information Systems and Organizations.

Transparency

Sections 522a(e)(3) and (e)(4) of the Privacy Act and Section 208 of the E-Government Act require public notice of an organization’s information practices and the privacy impact of government programs and activities. Accordingly, DOT is open and transparent about policies, procedures, and technologies that directly affect individuals and/or their personally identifiable information (PII). Additionally, the Department should not maintain any system of records the existence of which is not known to the public.

As required by the E-Government Act of 2002, Pub. L. 107-347, and the Consolidated Appropriations Act, 2005, Pub. L. 108-447, the FAA is publishing this PIA to inform the public of the privacy risks and mitigation strategies associated with the FAA’s collection, use, dissemination, and retention of PII resulting from the rule.

The DOT has published the Privacy Act System of Records Notice (SORN), DOT/FAA 801, Aircraft Registration Records, providing notice to the public of its privacy practices regarding the collection, use, sharing, safeguarding, maintenance, and disposal of information about an individual that may be collected as part of the aviation registration records that FAA must collect pursuant to 49 U.S.C. 44102, 44103, 44104-44107, 44110, 44111, and other statutory and regulatory provisions. System of Records Notice 801 advises the public of the FAA’s collection and retention of aircraft registration numbers, aircraft manufacturers’ names and contact information, and several other categories of records.

The DOT and FAA remain uncertain of precisely what information the agency will ultimately collect in connection with the declarations of compliance and custom means of compliance in accordance with the Small UAS Operations over People proposed rule. Therefore, the agency is uncertain as to whether this

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4 All of the Department of Transportation’s system of records notices can be found on the Department’s privacy webpage at www.transportation.gov/privacy.
existing SORN 801 will adequately encompass the information the FAA proposes to collect and store under the proposed rule.

As required by 5 U.S.C. 552a(e)(3), the FAA will ensure that, prior to collection of any information on individuals, it will provide notice to individuals about its practices for the collection, use, and dissemination of an individual’s PII on any information collection instrument. It will do so either by revising SORN 801, revising another existing SORN, or creating a new SORN to cover the collection of this information.

Additionally, Privacy Act Statements will be provided on all means of collection of information from the public where required by the Privacy Act.

Individual Participation and Redress

DOT should provide a reasonable opportunity and capability for individuals to make informed decisions about the collection, use, and disclosure of their PII. As required by the Privacy Act, individuals should be active participants in the decision-making process regarding the collection and use of their PII, and should be provided reasonable access to their PII and the opportunity to have it corrected, amended, or deleted, as appropriate.

All information collected via a Declaration of Compliance, or a custom means of compliance, would be voluntarily provided by and collected directly from the manufacturer or applicant. The FAA, however, would not accept incomplete Declarations of Compliance or incomplete custom means of compliance. In addition, Declarations of Compliance that contain false information would not be eligible to operate over people under two of the three categories of the proposed rule. Due to the nature of the submittal and review process, the FAA may discover inaccurate information about the applicant. The applicant would be informed of any such inaccuracies during the FAA’s review of a Declaration of Compliance, and the applicant would be required to correct any inaccuracies before the FAA accepted a Declaration of Compliance.

Accessing and Contesting Records

Applicants submitting Declarations of Compliance and/or custom means of compliance who wish to know whether their records appear in the systems described in this PIA may inquire in person or in writing to:

Federal Aviation Administration
Privacy Office
800 Independence Ave. SW
Washington DC, 20591

Included in the request must be the following:

- Name,
- Mailing address,
- Phone number or email address,
- A description of the records sought, and if possible, the location of the records and system(s) acronym(s).
Applicants wanting to contest their information that is contained in the systems described in this PIA should make their requests in writing, detailing the reasons for why the records should be corrected, to the following address:

Federal Aviation Administration
Privacy Office
800 Independence Ave. SW
Washington DC, 20591

Process-specific information, in addition to the information provided above, is as follows:

**Purpose Specification**

DOT should (i) identify the legal bases that authorize a particular PII collection, activity, or technology that impacts privacy; and (ii) specify the purpose(s) for which it collects, uses, maintains, or disseminates PII.

The FAA’s use of information will be managed in accordance with the Privacy Act. All data elements will be collected via authorized websites and/or forms. The FAA will use contact information to follow up with applicants who submit a Declaration of Compliance or custom means of compliance for FAA acceptance. Such information is used to identify applicants and associated small UAS; to determine continued compliance with the performance-based requirements of the proposal; and to ensure continued monitoring and correction of safety defects.

Specific use of PII and authority for collection is detailed below.

**Declaration of Compliance and Custom Means of Compliance**

The FAA proposes to collect PII on the Declaration of Compliance to identify the name and contact information of the person who applies for FAA acceptance of the Declaration of Compliance, the small UAS information as well as the means of compliance for fulfilling the performance-based standards of the proposal. The FAA may also use this information to contact applicants. Analogously, the FAA collects PII for applicants submitting a custom means of compliance to identify the name of the applicant and for the purposes of contacting the applicant. A list of authorities for the FAA’s collection and maintenance of PII in connection with the activities implemented under the proposal is below:

- Proposed 14 CFR § 107.125 – Means of Compliance. Any person who seeks FAA acceptance of a means of compliance with the performance-based standards of the proposed rule will be required to submit information in support of the request for FAA acceptance. Applicants may submit means of compliance in conjunction with their Declarations of Compliance, to request contemporaneous FAA acceptance of them.
- Proposed 14 CFR § 107.135 – Declaration of Compliance. Any person who seeks to qualify a small UAS for operations over people under two of the three categories the FAA proposes to permit must submit a Declaration of Compliance to the FAA in a form and manner acceptable to the FAA Administrator.

49 U.S.C. 106(f), 40101 note, 40103(b), 44701(a)(5), 46105(c), 46110 – Authorizing the Administrator to prescribe regulations, standards, and procedures and issue orders with respect to aviation safety.
- 49 U.S.C. 44807(b) (2018) – Authorizing the Secretary to determine which types of UAS, as a result of their size, weight, speed, operational capability, proximity to airports and populated
areas, operation over people and operation within or beyond visual line of sight, or operation during the day or night, do not create a hazard to users of the national airspace system or the public.

Data Minimization & Retention

DOT should collect, use, and retain only PII that is relevant and necessary for the specified purpose for which it was originally collected. DOT should retain PII for only as long as necessary to fulfill the specified purpose(s) and in accordance with a National Archives and Records Administration (NARA)-approved record disposition schedule.

Declaration of Compliance and Custom Means of Compliance

The FAA proposes to collect the minimum amount of information necessary to link a Declaration of Compliance to the applicant who submitted it and the small UAS to which it applies. The FAA would collect the minimum amount of information for correspondence with applicants submitting a means of compliance, and to ensure continued compliance with the performance based requirements of the proposal. The FAA will retain and dispose of information in accordance with an applicable records retention schedule as required by the National Archives and Records Administration (NARA).

Currently, no records are being created or maintained pursuant to this NPRM. When the rule becomes effective and the agency is able to determine exactly what information will be collected, it will submit a request to NARA for a records disposition schedule. Until NARA grants disposition authority for these records, they will be maintained indefinitely.

Use Limitation

The DOT shall limit the scope of its PII use to ensure that the DOT does not use PII in any manner that is not specified in notices, incompatible with the specified purposes for which the information was collected, or for any purpose not otherwise permitted by law.

The DOT is committed to ensuring, in amending an existing SORN or in creating a new one, that it accurately and completely lists all uses for which the agency may disclose any information it collects under this proposed rule. However, until a final rule is published and the DOT can determine exactly what information will be collected, it is not clear whether an existing SORN, will apply. When information to be collected has been identified, and it has been determined that DOT will be maintaining a system of records, as defined under the Privacy Act, DOT will examine SORN coverage for the system of records, and ensure that the PIA is updated with all applicable routine uses listed in the applicable SORN(s). Any new or revised SORN(s) will include, at minimum, a routine use allowing the public posting of accepted Declarations of Compliance. The proposed language for this routine use is as follows:

To the public, FAA-accepted Declarations of Compliance, including any history of previous, pending, existing, or denied requests for Declarations applicable to the small UAS at issue. Email addresses and telephone numbers will not be disclosed pursuant to this Routine Use.

The DOT will not maintain any Privacy Act system of records until appropriate SORN coverage exists.
Data Quality and Integrity

In accordance with Section 552a(e)(2) of the Privacy Act of 1974, DOT should ensure that any PII collected and maintained by the organization is accurate, relevant, timely, and complete for the purpose for which it is to be used, as specified in DOT’s public notice(s).

Individuals providing information to the FAA in paper or electronic form are responsible for ensuring the accuracy of their own data. Data that is scanned or transcribed by the FAA from paper records into electronic records are checked for accuracy through the FAA’s quality assurance processes. Systems that collect information electronically have technical capabilities such as data field checks (e.g., ensuring numeric digits or symbols are not input into name fields) to support accurate data submissions. As appropriate, the FAA may validate data against existing repositories. The integrity of all systems is protected in accordance with the standards discussed in the Security section of this PIA. Individuals may access and update their PII as discussed in the Redress and Individual Participation portion of this PIA.

Specific quality and integrity activities and standards for processes are provided below.

Declaration of Compliance

Applicants who submit an electronic Declaration of Compliance will enter their information directly into the FAA’s website. The FAA has not yet developed a specific portal for receipt of this information. Prospectively, the system would be designed in a manner that the information submitted would fulfill the completeness and quality standards applicable to the proposed requirements. A manufacturer would be permitted to label his or her small unmanned aircraft for Category 2 or 3 operations once he or she receives notification of the FAA’s acceptance of the applicable Declaration of Compliance. If a Declaration of Compliance was previously rescinded for safety reasons, the applicant may resubmit a Declaration that is subject to a more comprehensive review by the FAA. Upon resubmission of the new Declaration of Compliance, the FAA would review and accept this new Declaration of Compliance if the FAA determined that the safety defect had been satisfactorily resolved. The staff of the FAA’s Aircraft Certification Service would complete the review associated with resolving safety issues.

Submission of a Custom Means of Compliance

The proposed rule would allow anyone to propose a means of compliance by submitting the required information to the FAA, including certain PII, for FAA review and acceptance.

When seeking acceptance of a custom means of compliance separate from a Declaration of Compliance, an applicant should propose their means of compliance to the local Aircraft Certification Office or to the UAS Integration Office. Applicants seeking FAA acceptance of a means of compliance must provide the information required by the proposal. Applicants would be responsible for ensuring the accuracy of the information they provide to the FAA on the submittal instrument. Applicants may be contacted to provide additional information to support their application if incomplete.

Security

The DOT shall implement administrative, technical, and physical measures to protect PII collected or maintained by the Department against loss, unauthorized access, or disclosure, as required by the Privacy Act, and to ensure that organizational planning and responses to privacy incidents comply with OMB policies and guidance.

FAA’s PII-protective security safeguards apply to all small UAS-related PII systems examined in this analysis. Most notable among these are the safeguards incorporating standards and practices required for
federal information systems under the Federal Information Security Management Act (FISMA), and are
detailed in Federal Information Processing Standards (FIPS) Publication 200, Minimum Security
Requirements for Federal Information and Information Systems, dated March 2006, and National
Institute of Standards and Technology (NIST) Special Publication (SP) 800-53, Revision 4, Security and
Privacy Controls for Federal Information Systems and Organizations, dated April 2013. FAA systems
protect PII with reasonable security safeguards against loss, unauthorized access, destruction, usage,
modification, or disclosure. Role-based security is defined within all applications. Roles are assigned
based on job title and need. Users receive the least privileges necessary to perform their job duties. Each
FAA system discussed in this PIA must be certified and accredited before being placed into operation
and authorized to collect, access, use, retain, and/or dispose of PII. The security posture of all systems is
reviewed on a regular basis.

Accountability and Auditing

*The DOT shall implement effective governance controls, monitoring controls, risk management, and
assessment controls to demonstrate that the DOT is complying with all applicable privacy protection
requirements and minimizing the privacy risk to individuals.*

The FAA’s Office of the Chief Information Officer, Office of Information Systems Security, Privacy
Division is responsible for governance and administration of FAA Order 1370.121, FAA Information
Security and Privacy Program Policy. FAA Order 1370.121 implements the various privacy
requirements based on the Privacy Act of 1974 (the Privacy Act), the E-Government Act of 2002
(Public Law 107-347), the FISMA, DOT privacy regulations, Office of Management and Budget (OMB)
mandates, and other applicable procedures and guidance.

In addition to these practices, additional policies and procedures will be consistently applied, especially
as they relate to protection, retention, and destruction of records. Federal and contract employees are
given clear guidance regarding their duties as they relate to collecting, using, processing, and securing
privacy data. Guidance is provided in the form of mandatory annual security and privacy awareness
training, as well as FAA Privacy Rules of Behavior.

The FAA periodically conducts privacy compliance reviews of all FAA systems that retain and/or
process PI with the requirements of the OMB Circular A-130, Managing Information as a Strategic
Resource.

*Responsible Official*

Guido Hassig
Aviation Safety Inspector
585-436-3880
UAS-help@faa.gov

*Approval and Signature*

Claire W. Barrett
Chief Privacy & Information Asset Officer
Office of the Chief Information Officer
privacy@dot.gov