



U.S. Department of Transportation
Privacy Impact Assessment
Federal Aviation Administration (FAA)

**Operation of Small Unmanned Aircraft Systems Over
People Notice of Final Rulemaking
(sUAS Over People FR)**

Responsible Official

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Executive Summary

The Federal Aviation Administration (FAA) is publishing the Operation of Small Unmanned Aircraft Systems Over People final rulemaking in accordance with the [FAA Reauthorization Act of 2018, Pub. L. 115-254 \(2018\)](#). The FAA published a Small Unmanned Aircraft Systems Over People Notice of Proposed Rulemaking Privacy Impact Assessment on March 18, 2019. That NPRM added a new subpart to [Title 14 Code of Federal Regulations \(14 CFR\) part 107](#) establishing a framework that would allow certain small Unmanned Aircraft Systems (small UAS) to operate over human beings. The final rulemaking allows small UAS expanded routine operations over people, operations over moving vehicles, and operations at night without a waiver or exemption, under certain conditions. The final rulemaking also revises regulations to require a remote pilot to complete recurrent training instead of recurrent aeronautical knowledge testing. Additionally, this final rulemaking requires the remote pilot in command to have their remote pilot in command certificate readily accessible and be able to present this certificate, along with requisite identification, to certain Federal, state, or local officials, upon request. The FAA is publishing a Privacy Impact Assessment that addresses the privacy concerns raised by members of the general public associated with the operational use of small UAS over people.¹

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 documented assurance that privacy issues have been identified and adequately addressed. Upon reviewing the PIA, you should have a broad understanding of the risks and potential effects associated with the Department activities, and processes described and approaches taken to mitigate any potential privacy risks raised by the public.

Introduction & 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

¹ On March 13, 2018, in accordance to the [E-Government Act of 2002, Pub. L. 107-347](#), and the [Consolidated Appropriations Act, 2005, Pub. L. 108-447](#), the FAA published a Privacy Impact Assessments (PIA) to inform the public of the privacy risks and mitigation strategies associated with the FAA's collection, use, dissemination, and retention of personally identifiable information (PII) that would result from the proposed rule. In addition to this PIA, the FAA will also publish a separate PIA that addresses those same aspects in the implementation of the Final Rule.



integrate small Unmanned Aircraft Systems (small UAS) into the National Airspace System (NAS). In response to this statutory mandate, the FAA is publishing the Operation of Small Unmanned Aircraft Systems Over People Notice of Final Rulemaking (NFRM) (also referenced as Operations Over People Rule), designed to allow low-risk small UAS operations over people. The Operations Over People Rule, a new subpart to Title 14 Code of Federal Regulations (14 CFR) part 107, addresses the requirements that would govern the eligibility of small UAS to operate over people.

On January 15, 2021, the FAA published the final rulemaking which continues the documentation requirements for manufacturers that construct small UAS eligible for certain operations over human beings (86 FR 4314). These manufacturers would submit a Declaration of Compliance to the FAA that, among other things, would establish compliance with the performance based requirements of the proposal. Like the NPRM, the final rule allows expanded routine operations of small UAS over people, without a waiver or exemption, under certain conditions. Prior to this final rule, small UAS operations over people were limited to operations over people who are directly participating in the operation, located under a covered structure, or inside a stationary vehicle. This final rule expands the ability to conduct operations over people, provided that the operation meets the requirements of one of four operational categories. This final rule establishes subpart D to part 107, which sets forth the aircraft eligibility and operating requirements for the four categories of operations over people. This final rule also requires the remote pilot in command to have their remote pilot in command certificate readily accessible and to present this certificate, along with requisite identification, to certain Federal, state, or local officials, upon request. The final rule does not grant operators of small UAS permission to create a nuisance to any person, to operate the small UAS in an unsafe manner as to create an undue hazard to persons or property on the ground, or to operate in violation of FAA, federal, state, or local authorities' final rules and regulations.

Operations Over Moving Vehicles

While small UAS operations over people in moving vehicles were prohibited in § 107.39, this final rule allows small UAS operations over people inside moving vehicles, subject to the following conditions. First, the small UAS operation must either meet the requirements for a Category 1, 2, or 3 operation under the new subpart D of part 107, or meet the requirements for Category 4 small UAS. Second, for Category 1, 2, or 3, the operation must meet one of the following conditions: (1) the small UAS must be within or over a closed- or restricted-access site where any human beings located inside a moving vehicle within the closed- or restricted-access site is on notice that a small UAS may fly over them; or (2) if the operation is not within or over a closed- or restricted-access site, the small UAS must not maintain sustained flight over moving vehicles.



Night Operations

This final rule allows routine operations of small UAS at night under two conditions. First, the remote pilot in command must complete a current initial knowledge test or recurrent training, as applicable, to ensure familiarity with the risks and appropriate mitigations for nighttime operations. Second, the small UAS must have anti-collision lighting visible for at least 3 statute miles that has a flash rate sufficient to avoid a collision.

Pilot Testing and Training

Part 107 previously required initial small UAS remote pilot applicants and current holders of a small UAS remote pilot certificate to complete either an initial aeronautical knowledge test or a recurrent aeronautical knowledge test within the previous 24 calendar months prior to operating a small UAS. This final rule revises these regulations to require recurrent training instead of a recurrent aeronautical knowledge test. This final rule maintains, as proposed, the provision that people who hold a part 61 pilot certificate (other than holders of a student pilot certificate) and have completed a flight review within the previous 24 calendar months, in accordance with § 61.56, may continue to complete either initial training or recurrent training.

Privacy Considerations Related to the Operations of Small UAS Flying Over People

This Privacy Impact Assessment addresses the privacy concerns raised by members of the general public associated with the operational use of small unmanned aircraft over people. Specifically, in response to the NPRM for the Operations Over People Rule, the FAA received privacy-specific comments that reflected an overall concern the final rulemaking would encroach on the public's privacy, both in their personal residences and public places (such as beaches, parks, etc.). For example, the general public raised concerns that the operators of small UAS, equipped with imaging devices, would invade personal privacy by capturing unauthorized images of people on the ground or located in their personal dwellings. The general public also raised concerns related to the physical safety and invasion of private property.

While the FAA is not authorized to impose regulations on privacy concerns, the FAA has taken actions that should mitigate these concerns. As explained below, the FAA has collaborated with the public, stakeholders, and other agencies with authority over these matters. In addition, in order to meet the FAA's mandate to further the safe integration of small UAS into the airspace of the United States, the FAA is publishing the Remote Identification of Unmanned Aircraft (RID) Final Rule. The RID rule requires the remote identification of unmanned aircraft to address safety, national security, and law enforcement concerns. While not specifically intended to address the privacy concerns raised in response to the Operations Over People Rule, the RID rule will result in an increased capability by law enforcement entities to better identify small UAS operators that are subjects of law enforcement complaints raising such privacy concerns. These actions, as more fully



described below, will help mitigate the privacy concerns raised by the general public in response to Operations Over People Rule.

FAA External Engagement

The FAA has actively engaged with relevant stakeholders on these privacy issues. 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 the “Voluntary Best Practices for UAS Privacy, Transparency, and Accountability.” These best practices include guidelines for neighborly UAS usage and can be found at: <https://www.ntia.doc.gov/blog/2016/finding-common-ground-uas>. The guidelines provide the flexibility to evolve as the industry grows while ensuring a baseline understanding of ethical practices. The FAA has added information about this guide to 14 C.F.R. part 107 testing, training, and guidance material that the FAA is providing to initial remote pilot applicants and current holders of a remote pilot certificate.

Additionally, the FAA is working to educate the small UAS community, stakeholders, and citizens about the rules to operate safely and responsibly. The FAA has provided an outreach campaign to promote safe and responsible use of small UAS called “Community Engagement Toolkits.” The Community Engagement Toolkits include topics, such as Drones and Wildfire Digital Toolkit, No Drone Zone, Follow Buzzy the Drone, Manufacturer’s Toolkit, Recreational Flyers Toolkit, and Know Before You Fly Toolkit. The free digital toolkits offer material to federal, state, local, and other partners to educate small unmanned aircraft operators that flying a small UAS is prohibited in certain areas.

The FAA strongly encourages all small UAS remote pilots to check local and state laws before gathering information through remote sensing technology or photography. As part of a privacy education campaign, the agency provided all drone users with recommended privacy guidelines as part of the UAS registration process. The FAA also issued guidance to local and state governments on drone privacy issues. The FAA’s efforts builds on the year-long outreach initiative with privacy advocates and industry experts, such as the NTIA,

The FAA retains the responsibility for enforcing Federal Aviation Regulations, including those applicable to the use of UAS. The agency recognizes that state and local law enforcement agencies (LEAs) are often in the best position to deter, detect, immediately investigate, and as appropriate, pursue enforcement actions to stop unauthorized or unsafe UAS operations. The FAA also notes that certain federal, state, and local protections of individual privacy do exist. Such protections may provide recourse for any potential invasion of personal privacy that might result from third party use of an unmanned aircraft.



As such, the FAA has established working relationships with state and local law enforcement agencies through collaboration, outreach, and education. The FAA works with these authorities to investigate all types of UAS incidents, accidents, occurrences, and complaints. When requested, the FAA may provide assistance, in accordance with applicable law, to federal, state, and local authorities in the investigation of UAS invasion of personal privacy occurrences. The public should also check with their state and local authorities for any laws pertaining to the operation of unmanned aircraft.

The general public can also find information on reporting small UAS concerns on the FAA website at: https://www.faa.gov/uas/contact_us/report_uas_sighting/. When a small UAS is found to be operating in a dangerous manner or is being used to commit a crime, this should be reported immediately to the appropriate local law enforcement agency. Complainants should provide enough detailed information related to the alleged invasion of privacy concern to assist law enforcement in their investigation. Unauthorized UAS operators may be subject to penalties and criminal charges.

Associated Rulemaking

The FAA is publishing the Remote Identification of Unmanned Aircraft (RID) Final Rulemaking at: 86 FR 4390 (January 15, 2021). In order to meet the FAA's mandate to further the safe integration of small UAS into the airspace of the United States, the RID final rulemaking requires the remote identification of unmanned aircraft to address safety, national security, and law enforcement concerns, which can include law enforcement complaints associated with personal privacy violations. As a result of an increased capability to identify small UAS operating over people through remote identification, protection of citizens' privacy will also be enhanced by assisting law enforcement agencies to better identify small UAS operators that are subjects of law enforcement complaints, raising such privacy concerns. All small UAS will be required to be equipped with a broadcast module. The broadcast module will broadcast identification, location, and performance information about the small UAS, and the small UAS' takeoff location. The FAA will use this information in its investigation of any alleged violations of FAA regulations. This information may also assist federal, state, and local authorities in locating the operator of an alleged offending small UAS that has operated over people and invaded personal privacy.

While the FAA does not have the authority to regulate privacy in the operation of small UAS, the actions taken above, reflect the FAA's ongoing efforts to mitigate the privacy concerns raised as a result of the Operations over People Rule.



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) v3², 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 Organizations³.

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 discussed above, this PIA does not address any privacy-implications associated with the collection of information associated with the implementation of the Operations Over People Rule. However, the FAA has utilized the FIPPs framework to further address the privacy concerns raised by the general public associated with operations of small UAS over people.

The FAA has been transparent with its activities related to small UAS. As reflected above, as part of a privacy education campaign, the agency provided all drone users with recommended privacy guidelines as part of the UAS registration process. Additionally, the FAA participated in the multi-stakeholder engagement process led by the NTIA which led to publication of the "Voluntary Best Practices for UAS Privacy, Transparency, and Accountability." The FAA has added information about these best practices to part 107 testing, training, and guidance material that the FAA is providing to initial remote pilot applicants and current holders of a remote pilot certificate.

The FAA initially published the [Operation of Small Unmanned Aircraft Systems Over People Notice of Proposed Rulemaking](#) along with the [Small UAS Ops Over People Notice of Proposed Rulemaking PIA](#). The FAA has currently published this PIA to provide full transparency of privacy mitigation measures taken surrounding the flight of small UAS over

² <http://www.cio.gov/documents/FEA-Security-Privacy-Profile-v3-09-30-2010.pdf>

³ http://csrc.nist.gov/publications/drafts/800-53-Appendix-J/IPDraft_800-53-privacy-appendix-J.pdf



people as a result of the implementation of the final rulemaking. This PIA also fully describes the steps the FAA has taken to mitigate the privacy risks raised by the general public. The related final rulemaking is published at 86 FR 4314 (January 15, 2021). The FAA is additionally drafting a PIA on the Remote ID final rulemaking to discuss the related privacy risk mitigation strategies (available at: <https://www.transportation.gov/individuals/privacy/privacy-impact-assessments>) with the accompanying final Remote ID rulemaking published at 86 FR 4390 (January 15, 2021).

The FAA will additionally communicate with the general public on the final rulemaking's requirements and implementation using a variety of other platforms, including news media, social media, and other elements.

Lastly, other forms of public notice include: the [Small UAS Rulemaking](#) PIA, in addition to the forthcoming Declaration of Compliance PIA (available at: <https://www.transportation.gov/individuals/privacy/privacy-impact-assessments>). Any other systems that are developed to help assist with this rulemaking will also have their own PIAs published at the DOT website referenced here.

Individual Participation and Redress

DOT provides 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 they are provided reasonable access to their PII and the opportunity to have their PII corrected, amended, or deleted, as appropriate.

This FIPPs principle is not applicable to this PIA because this PIA is not intended to address the collection, use, of personally identifiable information by DOT. However, as reflected above, if an individual believes their privacy has been violated by the operation of an UAS, can find information on reporting small UAS concerns on the FAA website at: https://www.faa.gov/uas/contact_us/report_uas_sighting/. In addition, they can submit complaints to their local law enforcement entity.

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.

This FIPPs principle is not applicable to this PIA because this PIA does not address the collection of personally identifiable information required to implement the Operations Over



People Rule. However, below are the FAA's authorities providing the basis for issuing the Rule.

- 49 U.S.C. 40103(b), 44701(a)(5), 44703(a) – Authorizing the Administrator to prescribe regulations, standards, procedures, and issue orders with respect to aviation safety.
- 49 U.S.C. 44807 – 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.

Moreover, as a result of the information collected in implementation of the Operations Over People Rule, where permissible under law, the FAA may share information with federal, state and local law enforcement agencies to assist with the mitigation of the privacy concerns associated with the operations of small UAS over people.

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.

This FIPPs principle is not applicable to this PIA because this PIA does not address the collection of personally identifiable information required to implement the Operations Over People Rule. However, the main system being developed to collect and retain compliance related data associated with the Operations Over People Rule is called the Declaration of Compliance system. That system will have its own PIA that will be published at: <https://www.transportation.gov/individuals/privacy/privacy-impact-assessments>. Please refer to the Declaration of Compliance and other system specific PIAs for discussions of the specific data to be collected from applicants and the retention period for these record types.

Any other systems that are developed to help assist with this rulemaking will also have their own PIAs published at the website referenced above.

Use Limitation

DOT shall limit the scope of its PII use to ensure that the Department 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.

This FIPPs principle is not applicable to this PIA because this PIA does not address the collection of personally identifiable information required to implement the Operations Over People Rule.



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 the Department's public notice(s).

This FIPPs principle is not applicable to this PIA because this PIA does not address the collection of personally identifiable information required to implement the Operations Over People Rule.

Security

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.

This FIPPs principle is not applicable to this PIA because this PIA does not address the collection of personally identifiable information required to implement the Operations Over People Rule.

Accountability and Auditing

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

This FIPPs principle is not applicable to this PIA because this PIA does not address the collection of personally identifiable information required to implement the Operations Over People Rule.

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Approval and Signature

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