U.S. Department of Transportation

Privacy Impact Assessment (PIA)

Federal Aviation Administration (FAA)
Privacy ICAO Address System

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Executive Summary

On May 28, 2010, the Federal Aviation Administration (FAA) published the Automatic Dependent Surveillance Broadcast (ADS-B) final rule mandating that aircraft flying in certain controlled airspace be equipped with ADS-B Out capability not later than January 1, 2020.[1] ADS-B Out, broadcasts information about an aircraft's flight identification and 24-bit ICAO aircraft address to any ADS-B 1090 MHz receiver within line-of-sight. Some General Aviation (GA) and business aircraft operators have expressed concerns about potential privacy risks resulting from equipping their aircraft with this technology. To address these concerns the FAA created the Privacy International Civil Aviation Organization (ICAO) Address Program, which allows operators to use alternate, temporary ICAO aircraft addresses not attributable to an owner/operator in the publicly available Civil Aviation Registry.

This Privacy Impact Assessment (PIA) was developed pursuant to Section 208 of the E-Government Act of 2002 because the FAA will collect, use and maintain Personally Identifiable Information (PII) from aircraft owner/operators to facilitate this voluntary means of addressing the privacy concerns of aircraft operators.

Introduction & System Overview

The Federal Aviation Act of 1958 gives the Federal Aviation Administration (FAA) the responsibility to carry out safety programs to ensure the safest, most efficient aerospace system in the world. The FAA is responsible for:

- Regulating civil aviation to promote safety;
- Encouraging and developing civil aeronautics, including new aviation technology;
- Developing and operating a system of air traffic control and navigation for both civil and military aircraft;
- Developing and carrying out programs to control aircraft noise and other environmental effects of civil aviation; and
- Regulating U.S. commercial space transportation.

The FAA published the Automatic Dependent Surveillance Broadcast (ADS-B) Out Performance Requirements to Support Air Traffic Control (ATC) Service; Final Rule (ADS-B Out Rule) on May 28, 2010..[2] The ADS-B Out Rule requires ADS-B Out equipment be installed on aircraft seeking to operate in certain classes of airspace within Classes A, B, and C airspace, as well as other specified classes of the United States Airspace System not later than January 1, 2020.

ADS-B Out Overview:

ADS-B improves safety and efficiency in the air and on runways, reduces costs, and lessens harmful effects on the environment. ADS-B is an environmentally friendly technology that enhances safety and efficiency, and directly benefits pilots, controllers, airports, airlines, and the public. It forms the foundation for the future of air traffic control by moving from ground radar and navigational aids to precise tracking using satellite signals. ADS-B reduces the risk of runway incursions with cockpit and controller displays that show the location of aircraft and

[1] See (Federal Register/Vol. 75, No. 103, available at https://www.govinfo.gov/content/pkg/FR-2010-05-28/pdf/2010-12645.pdf.

[2] 75 FR 48553, Docket No. FAA-2007-29305 Amdt. No. 91-314, published 08/11/2010.

equipped ground vehicles on airport surfaces – even at night or during heavy rainfall. ADS-B also provides greater coverage since ground stations are so much easier to place than radar. Remote areas without radar coverage, like the Gulf of Mexico and parts of Alaska, now have surveillance with ADS-B. Relying on satellites instead of ground navigational aids also means aircraft will be able to fly more directly from Point A to B, saving time and money, and reducing fuel burn and emissions. The improved accuracy, integrity and reliability of satellite signals over radar means controllers eventually will be able to safely reduce the minimum separation distance between aircraft and increase capacity in the nation's skies.

ADS-B Out systems automatically transmit/broadcast an aircraft's GPS position, altitude, velocity and other information to ground stations and to ADS-B In-equipped aircraft in the vicinity once per second.[3] Air traffic controllers and aircraft equipped with ADS-B In can immediately receive this information. This offers more precise tracking of aircraft compared to radar technology, which sweeps for position information every 5 to 12 seconds. ADS-B ground stations are smaller and more adaptable than radar towers and can be placed in locations not possible with radar. With ground stations in place throughout the country, even in hard to reach areas, ADS-B provides better surveillance regardless of the terrain or other obstacles.

The APM which primarily processes ADS-B surveillance reports to monitor aircraft performance and compliance with the ADS-B Out mandate is also used to store Privacy ICAO Address assignment database information and correlation of flight operations for aircraft that may be using multiple ICAO addresses through the Privacy ICAO Address program. The Privacy ICAO Address application, which includes aircraft registration and contact information for the aircraft owner/operator, is a separate database table within the APM. The APM uses Privacy ICAO Address applicant information to validate against the Civil Aviation Registry (CAR) to ensure it is a registered aircraft. Upon validation, a Privacy ICAO Address assignment is made from the inventory of ICAO addresses in the privacy pool for use by the aircraft owner/operator. The Privacy ICAO Address would thereafter be associated with a given aircraft, though it would be done outside the CAR. In other words, Privacy ICAO Addresses codes assignments would be stored within the APM in order to identify the set of assigned privacy ICAO addresses, contact those aircraft owner/operators, and to map Privacy ICAO Addresses to the appropriate aircraft being evaluated for performance and compliance. The privacy pool of ICAO addresses is partitioned from the FAA's permanent ICAO address assignment and managed outside the Civil Aviation Registry (CAR), resulting in ICAO addresses that can no longer be associated with aircraft registered in the CAR.

Prior to submitting a Privacy ICAO Address application, the Privacy ICAO Address applicant will have to obtain a Public ADS-B Performance Report (PAPR) to ensure that the transponder does not exhibit any non-performing emitter (NPE) issues and is transmitting the correct ICAO address. The APM enables FAA to assist aircraft owners, pilots and avionics installers to validate the performance of their ADS– B equipment installation upon request. This is communicated via the PAPR.

[3] The 2010 final rule only mandated ADS-B Out. However, some aircraft have opted to go beyond the mandate to equip with ADS-B In. ADS–B In refers to an appropriately equipped aircraft's ability to receive and display another aircraft's ADS–B Out information as well as the ADS–B In services provided by ground systems, including Automatic Dependent Surveillance–Rebroadcast (ADS–R), Traffic Information Service–Broadcast (TIS–B), and, if so equipped, Flight Information Service–Broadcast (FIS–B). Information on ADS-B In can be found here: https://www.faa.gov/nextgen/programs/adsb/pilot/.

The APM produces a PAPR for anyone requesting the performance of an ADS-B Out equipment installation. This report is available independent of the Privacy ICAO Address Program.[4] After January 1, 2020, the FAA organization will utilize the ADS-B Compliance Monitor to enforce compliance with 14 CFR §§ 91.225 and 91.227.

ADS-B Out information received by FAA ground stations is collected in the APM. The APM processes this information and calculates how well a given ADS-B Out equipped aircraft meets FAA performance requirements identified in the ADS-B Out Final Rule. The APM reports are used by the FAA to determine performance outcomes of aircraft and provide performance metrics for ADS-B Out equipped aircraft.

Privacy ICAO Address Program

General and business aviation aircraft operators have expressed concerns about privacy implications resulting from equipping their aircraft with ADS-B Out. These privacy concerns were raised to the FAA through private forums Advisory Committee Meeting repeatedly since 2014. Both the National Business Aircraft Association (NBAA) and Aircraft Owners and Pilots Association (AOPA) are proponents of FAA efforts to protect the security, privacy and business competitiveness of aircraft operators by developing the Privacy ICAO Address Program. Respected media outlets also recognized the importance of this privacy, as did members of both parties of Congress, who passed legislation requiring FAA to provide an opt-out from real-time broadcast of flight data. Through FAA's Equip 2020 Working Group there was work with FAA and other general aviation associations to develop an opt-out solution, based on providing operators an alternate 24-bit ICAO (Mode S transponder) code. Additionally, since 2000, Congress has repeatedly passed legislation mandating that the FAA provide a means for opting out from real-time flight tracking, regardless of the technology involved." To address these privacy concerns, the FAA developed the Privacy ICAO Address Program. The Privacy ICAO Address Program allows aircraft operators to utilize an alternate aircraft ID and ICAO aircraft address to mask their aircraft's identity for a period of time while flying within U.S. domestic airspace. Use of the alternate ID and ICAO code limits the extent to which the aircraft can be identified by non-FAA parties capturing the ADS-B signal.

The ADB-S equipment transmits the information about an aircraft on open channels making it possible for individuals to capture and use that information. ADS-B Out transmits information about the aircraft type, position, airspeed, aircraft's unique ICAO aircraft address and aircraft registration number. The unique ICAO aircraft address and aircraft registration numbers are assigned to all U.S. registered aircraft. Moreover, that information is compiled and searchable by the public in the FAA's Civil Aviation Registry (CAR). As such, once a third-party has captured an aircraft's ICAO aircraft address and aircraft registration number, he can readily identify the operator via CAR. In addition, software is available that allows a third-party to share ADS-B messages with anyone via on-line internet sites..

The FAA acknowledges the need of aircraft owners/operators to limit the ability of third-parties to identify operators and, subsequently, their ability to track aircraft in real-time. The Privacy ICAO Address program allows interested aircraft owners to request an alternate, temporary ICAO Aircraft Address, which will not made available in the CAR, and thereby reducing the ability of third-parties to identify the operator of an aircraft.

[4] The PAPR does not contain any information related to the Privacy ICAO Address Program.

Privacy ICAO Address Eligibility Requirements

The FAA has established four criteria aircraft owners/operators must meet to be eligible to use an alternate ICAO address under the Privacy ICAO Address Program:

1. Aircraft owner/operator must be registered in the US; foreign-registered aircraft are not eligible to participate;
2. Aircraft must be operated within U.S. domestic airspace;
3. Aircraft must have an FAA approved Third-Party Aircraft ID (call sign) issued by a Third-Party Call Sign service provider; and
4. Aircraft must be equipped with FAA Technical Standard Order (TSO)-certified equipment and verification that the equipment installation meets ADS-B Out performance requirements set forth in 14 CFR § 91.227.

Only U.S. registered aircraft owners and aircraft operators, operating within U.S. domestic airspace, can apply for, receive, and use a Privacy ICAO Address. Foreign-registered aircraft are not eligible to participate in the Privacy ICAO Address Program.

The Privacy ICAO Address Program will require the FAA and Privacy ICAO Address Service Provider(s) to validate that the aircraft owner/operator has an agreement with a Third-Party Call Sign Service Provider to use a Third-Party Aircraft ID. Aircraft owners/operators authorized by the FAA to use a Third-Party Aircraft ID are not required to use a Privacy ICAO Address(es). All aircraft owners/operators using a Privacy ICAO Address must use a Third-Party Aircraft ID while that aircraft is in communication with ATC and receiving ATC services.

Eligibility for the Privacy ICAO Address Program will require the installation of be eligible to use aircraft owners/operators are required to provide the following information within 30 days of receiving an alternate ICAO address from the FAA under the Privacy ICAO Address Program:

1. Install new alternate ICAO Address into aircraft avionics, and
2. Provide evidence of installation and correct operation to the FAA.[5]

Once issued and confirmed as operational, the alternate ICAO address and Third-Party issued call sign will be linked to the aircraft owner/operator in FAA system APM, however the information will not be made available in the public portion of the CAR or other publicly available data sets.

Privacy ICAO Address Program Application System Overview

Under the FAA's Privacy ICAO Program requires the operator, or authorized agent, to provide the aircraft owner/operator name, phone number, e-mail address, and business or home address. Aircraft owners/operators or an authorized agent must use the FAA web application found https://www.faa.gov/nextgen/equipadsb/privacy/ to request an alternative ICAO address and participate in the Privacy IACO Address Program. An Authorized agent is an individual who the operator has designated to complete the application on their behalf and enters the aircraft owner/operator's information and not their own.

[5] See Appendix A for detailed description of the request process.

The steps below describe the Privacy ICAO Address Program processes:

Step 1	Obtain initial PAPR; perform a validation flight and obtain a PAPR with aircraft's permanently assigned ICAO aircraft address.
Step 2	Submit a request for a Privacy ICAO Address.
Step 3	Install new Privacy ICAO Address into aircraft avionics; the new Privacy ICAO Address is a temporary assignment and owner/operator must complete Step 4 in order to continue using the Privacy ICAO Address.
Step 4	Verify new temporary Privacy ICAO Address installation; obtain another PAPR and send it to the FAA or Third-Party Service Provider.

The data collected from the aircraft owner/operator or authorized agent during the Privacy ICAO Address Program application process will be utilized for program participation verification, correspondence, and monitoring with DOT/FAA in order for the FAA to issue the Privacy ICAO Address.

The Privacy ICAO Address application website, https://www.faa.gov/nextgen/equipadsb/privacy/, is planned to be in place by January 1, 2020, to meet industry concerns, while the agreement and implementation actions for a long-term solution are pursued.

The owner/operator will be required to submit the information necessary to qualify for the authorized use of the Privacy ICAO Address. This includes:

- Aircraft owner/operator name;
- Acknowledgement of the FAA's intent of collection and management of PII for the management of Privacy ICAO Address assignment and their use in NAS;
- Acknowledgement of the Privacy ICAO Address Program Rules of Use in the NAS;
- Valid aircraft registration for the aircraft which will be assigned the Privacy ICAO Address (permanent ICAO aircraft address);
- Proof of authorization to use a Third-Party Aircraft ID with the identity of the provider;
- Aircraft owners/operators Individual's Name/Company/Organization Information;
- Aircraft owners/operator's contact information (i.e. phone number, e-mail address);
- Requester's contact information (phone number, e-mail address);
- Validation that the aircraft's ADS-B performance is qualified for ADS-B operations (PAPR report within the past 180 days); and
- Identify, by checking a box, whether the Privacy ICAO Address is requested for business or personal use.

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[6] *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.[7]

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 or records the existence of which is not known to the public.

The FAA deploys multiple techniques to ensure general aviation and business aircraft operators are aware of the requirements for the Privacy ICAO Address Program, and the purposes for which the FAA collects and maintains PII in support of the Privacy ICAO Address Program. The aircraft owner/operator's name and contact information (i.e. phone number, e-mail address, and business or home address) which is required to send responses and issue a new Privacy ICAO Address. In their outreach, the FAA held speaker events; posted information on the FAA websites; and publicized via Aircraft Owner and Pilot Association, National Business Aircraft Association, General Aviation Manufacturers Association, Aircraft Electronics Association and other organization as means to inform aircraft owner/operators. A Privacy Act Statement is available on the Privacy ICAO Address web application, providing notice of the use of information collected.

The Privacy ICAO Address Program retrieves records from APM by an owner/operator's name or e-mail address. The FAA protects Privacy Act records maintained in the APM in accordance with the Department's published system of records notices (SORN), entitled DOT/FAA 801 Aircraft Registration Records (80 FR 54187, August 15, 2016. A Privacy Act Statement discussing the Department's privacy practices regarding the collection, use, sharing, safeguarding, maintenance, and disposal of PII is included on the Privacy ICAO Address Program website. An authorized agent may enter information about the aircraft owner/operation but not themselves and not afforded coverage under the Privacy Act.

The publication of this PIA demonstrates DOT's commitment to provide appropriate transparency into the Privacy ICAO Address Program and APM.

[6] https://s3.amazonaws.com/sitesusa/wp-content/uploads/sites/1151/2016/10/FEA-Security-Privacy-Profile-v3-09-30-2010.pdf

[7] https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-53r4.pdf

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 be provided reasonable access to their PII and the opportunity to have their PII corrected, amended, or deleted, as appropriate.

The Privacy ICAO Address Program uses data collected directly from the aircraft owner/operator. An authorized agent may complete the Privacy ICAO Program application on the aircraft owner/operator's behalf; in doing so they would provide aircraft owner/operator's information and not their own.

Information collected for this Privacy ICAO Program includes the aircraft owner/operator's name and contact information (i.e., phone number, e-mail address, and business or home address) which is required to send responses and issue a new Privacy ICAO Address. Privacy ICAO Address Eligibility Requirements discussed previously in the PIA is necessary to determine eligibility to participate in the new Privacy ICAO Address Program and is subsequently necessary in order for the Privacy ICAO Address Program applicant to be issued a temporary Privacy ICAO address. Additionally, the FAA collects aircraft identifier (i.e., FAA-issued aircraft tail number and permanently assigned ICAO aircraft address) which is then used to enable FAA to determine which actual aircraft is associated with a particular Privacy ICAO Address.

Under the provisions of the Privacy Act, individuals may request searches to determine if any records have been added that may pertain to them. Individuals wishing to know if their records appear in APM system 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 and/or email address
- A description of the records sought, and if possible, the location of the records

Individuals wanting to contest information about them that is contained in this system should make their requests in writing, detailing the reasons why the records should be corrected, to the following address:

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

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 its collects, uses, maintains, or disseminates PII.

Under Title 49 of the United States Code (49 U.S.C.), Subtitle I, Section 106, the FAA is charged with prescribing regulations on the flight of aircraft (including regulations on safe altitudes) for navigating, protecting, and identifying aircraft, and the efficient use of the navigable airspace. Under section 44701, the FAA is charged with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce.

Privacy ICAO Address Program data and records will be used by the FAA to:

1. Issue a Privacy ICAO Address for eligible aircraft owner/operators; and
2. Validate the installation and performance of the avionics on the aircraft.

The Privacy ICAO Address Program collects the aircraft owner/operator's name and contact information (i.e., phone number, e-mail address, and business or home address). The information is used to send responses and issue a new Privacy ICAO Address. With the exception of the Privacy ICAO Address, information may be shared in accordance with DOT/FAA – 801 Aircraft Registration Records (81 FR 54187, August 15, 2016).

The CAR is responsible for developing, maintaining, and operating national programs for the registration of United States civil aircraft and certification of airmen.

ADS-B Out operates by transmitting the aircraft's unique ICAO address, making public identification by any individual with an ADS-B receiver possible. The Privacy ICAO Address Program will enable interested aircraft owners to request an alternate, temporary ICAO aircraft address, which will not be assigned to the owner/operator in the CAR. Information within the CAR is generally available to the public. Therefore, by default, an aircraft assigned a Privacy ICAO Address will be harder to identify. To ensure privacy, ADS-B Out is configured to use the Privacy ICAO Address and third-party call sign instead of the operators permanent ICAO aircraft address and aircraft registration number (tail number).

For general and business aviation aircraft, the term "aircraft callsign" (aircraft ID) means the radiotelephony callsign assigned to an aircraft for voice communications purposes. For General Aviation (GA) aircraft, the aircraft callsign is normally associated with the aircraft registration number (tail number). Mode S transponders functionality includes automatic transmission of aircraft callsign and Mode S 24-bit aircraft address(es). Both can be readily used in searching aircraft ownership information via FAA's CAR. Without the use of third-party Flight IDs, the broadcasting of aircraft callsign, i.e., N number or aircraft registration number, would still expose aircraft in CAR and no longer make aircraft operations anonymous.

In order to maintain privacy, and still have identification information readily available to the FAA, Privacy ICAO Address data is stored within the ADS-B APM. This makes Privacy ICAO Address(es) are harder for the public to link to identifying information to information in the CAR. The Privacy ICAO Address program manages and establishes procedures, outside of the CAR, for taking Privacy ICAO Address applications/requests, approving the requests and ensuring that latest Privacy ICAO Address aircraft operator list are not released or open for public review.

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.

The FAA collects the minimum amount of information necessary to establish and maintain a record to support the Privacy ICAO Address Program. Aircraft owner/operator's name and contact information (i.e., phone number, e-mail address, and business or home address) is used to send responses and issue a new Privacy ICAO Address.

Records for the Privacy ICAO Address Program will be maintained as permanent records until FAA receives an approved disposition authority from the National Archives and Records Administration (NARA). The FAA is recommending maintaining the records for 45 days to a year. The aircraft identification, owner/operator information, compliance reports, coverage maps, and data files will be destroyed after one year. The ADS-B surveillance data will be destroyed after 45 days.

The retention of the records allows for research, a complete history of aircraft owner/operators that have a Privacy ICAO Address.

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.

With the exception of the new Privacy ICAO Address, sharing of Privacy Act records collected, used, and maintained as part of the Privacy ICAO Address Program is done in accordance with the Department's system of records notice DOT/FAA – 801 Aircraft Registration Records (81 FR 54187 – August 15, 2016). In addition to other disclosures generally permitted under 5 U.S.C. §552a(b) of the Privacy Act, all or a portion of the records or information contained in this system may be disclosed outside DOT as a routine use pursuant to 5 U.S.C. § 552a(b)(3) as follows:

- To the public (including government entities, title companies, financial institutions, international organizations, FAA designee airworthiness inspectors, and others) information, including aircraft owner's name, address, United States Registration Number, aircraft type, and ADB–S summary reports.
- To law enforcement when necessary and relevant to an FAA enforcement activity.
- The Department has also published 14 additional routine uses applicable to all DOT Privacy Act systems of records. These routine uses are published in the Federal Register at 75 FR 82132, December 29, 2010, and 77 FR 42796, July 20, 2012, under ''Prefatory Statement of General Routine Uses'' (available at http://www.transportation.gov/privacy/privacyactnotices).

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).

Within the Privacy ICAO Address Program, aircraft owner/operators are responsible for the accuracy of information they provide during the application and confirmation. If an invalid aircraft registration number, Aircraft ID, or ICAO aircraft address is provided by the aircraft owner/operator during the application process, the system will not process the application.

To ensure quality control of the Privacy ICAO Address Program, aircraft owners/operators are not issued the same Privacy ICAO addresses at the same time. The Privacy ICAO address may be reused but not within a minimum of 30 days following the last use. Lastly, FAA use Captcha to distinguish that aircraft owners/operators are human and not a machine.

Security

DOT shall implement administrative, technical, and physical measures 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 protects PII with reasonable security safeguards against loss or unauthorized access, destruction, usage, modification, or disclosure. These safeguards incorporate 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.

The APM was issued a three-year Authorization to Operate (ATO) on January 29, 2017. In addition, the ATO will be updated based on the outcome of current security testing and evaluation in accordance with FISMA. Access to the APM and the Privacy ICAO Address Program application is limited to those with appropriate security credentials, an authorized purpose, and need to know. The FAA deploys role-based access controls in addition to other protection measures reviewed and certified by the FAA's cybersecurity professionals to maintain the confidentiality, integrity, and availability requirements of the system. The Privacy ICAO Address Program web application's "review" function will also provide FAA representatives with Privacy ICAO Address application status to determine number of Privacy ICAO Addresses issued. The function of the web application is only accessible to FAA-authorized personnel.

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.

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 and Policy provides implementation guidance for the various privacy requirements of the Privacy Act of 1974 (the Privacy Act), the E-Government Act of 2002 (Public Law 107-347), the FISMA, Office of Management and Budget (OMB) mandates, NIST and other applicable DOT and FAA information and information technology management procedures. In addition to these practices, additional policies and procedures will be consistently applied, especially as they relate to the access, protection, retention, and destruction of PII Federal and contract employees are given clear guidance in their duties as they relate to collecting, using, and processing privacy data. Guidance is provided in the form of mandatory annual security and privacy awareness training, as well as FAA Order 1370.121. The FAA will conduct periodic privacy compliance reviews of Privacy ICAO Address Program in accordance with the requirements of OMB Circular A-130.

Responsible Official

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Reviewing Official

Claire W. Barrett
Chief Privacy &Information Asset Officer
Office of the Chief Information Officer

Appendix A: ADS-B Performance Monitor (APM) Overview

ADS-B Performance Monitor (APM) system enables the FAA to monitor aircraft ADS-B equipment performance by:

- Identifying ADS-B Out equipment installed on aircraft and surface vehicles performing below the requirements defined in the ADS-B Out Final Rule; and
- Monitor ADS-B Out equipment performance and equipage rate.

ADS-B Out information received by FAA ground stations is collected in the APM. The APM processes this information and calculates how well a given ADS-B Out equipped aircraft meets FAA performance requirements identified in the ADS-B Out Final Rule. The APM reports are used by the FAA to determine performance outcomes of aircraft and provide performance metrics for ADS-B Out equipped aircraft.

The APM produces a Public ADS-B Performance Report (PAPR) for anyone requesting information about the performance of an ADS-B Out equipment installation. This report is available independent of the Privacy ICAO Address Program. After January 1, 2020, the FAA organization will utilize the ADS-B Compliance Monitor to enforce compliance with 14 CFR §§ 91.225 and 91.227. PAPR data provides information on the performance of an aircraft ADS-B's system for a specific flight and either verifies proper ADS-B system operation or identifies specific parameters received by the FAA's ground system, which failed to comply with established standards. ADS-B system performance data identified within a PAPR is useful to aircraft avionics maintainers when performing post-installation compliance/configuration checks and fault isolation. For additional information about the PAPR please visit: https://adsbperformance.faa.gov/PAPRUsersGuide.pdf.