U.S. Department of Transportation

Privacy Impact Assessment
Federal Aviation Administration
Air Traffic Organization (ATO)

National Flight Data Center (NFDC)

Responsible Official

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Executive Summary

49 U.S.C. § 329(b) requires the Secretary of Transportation to collect and collate transportation information to improve the transportation system of the United States. To fulfill the requirement to collect and make available aeronautical information, the Federal Aviation Administration (FAA) developed the National Flight Data Center (NFDC) as the central repository within the FAA responsible for the collection, validation, and quality control of aeronautical information disseminated to support National Airspace System (NAS) operations.

The FAA is publishing this Privacy Impact Assessment (PIA) in accordance with Section 208 of the E-Government Act of 2002 because NFDC collects and maintains Personally Identifiable Information (PII) from members of the public who register for NFDC access, including name, email address, phone number, login information, and business-related information.

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. 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;*

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[1]Office 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).

- *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.

Introduction & System Overview

49 U.S.C. § 329(a) gives the 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 United States (U.S.) commercial space transportation.

The NFDC operating within the FAA, serves as the central repository for aeronautical information essential for supporting NAS operations. NFDC is responsible for collecting, validating, and disseminating critical aeronautical data, including runway, communication, navigation aids and weather information. NFDC services are vital for ensuring that data related to aeronautical charts, flight supplements and flight management systems (FMS) are accessible to users in government, military, and civilian sectors.

The NFDC provides data via a public website and a secured portal. The public-facing site enables users to browse aeronautical data, such as airport communication frequencies and construction notices. The portal allows authorized users to submit and update aeronautical data, which is processed to ensure accuracy and compliance with national and international standards.

The NFDC collects PII in various forms, especially when users access the NFDC portal for submission purposes. The PII collected includes: first name, last name, email address, organization, position/title, username and password. The PII is stored within the system for account management, submission tracking, and security purposes. Additionally, some of the collected PII may be used in the test environment, where the system replicates the production data to validate new updates or features.

This service is critical to the NAS because pilots and air traffic controllers rely on the NFDC to ensure the accuracy and timeliness of the chart data. The data submitted to NFDC is used to update both public and private aeronautical charts, flight supplements, Flight Management Systems (FMS) and other aviation databases.

These products are updated on *Aeronautical Information Regulation and Control (AIRAC)* in 28-day cycle schedules. Failure to submit this data in a timely manner will result in obsolete/incorrect data being shown on the aeronautical products listed above. In addition, this data is also published in the NFDD (National Flight Data Digest), which is published daily by NFDC.

NFDC aeronautical information is used to develop and update Instrument Approach Procedures, digital products, aeronautical charts and related publications. The NFDC disseminates aeronautical information in accordance with standards established by the International Civil Aviation Organization (ICAO) and in accordance with the Aeronautical Information Regulation and Control (AIRAC) cycle.

The Aeronautical Information Portal provides the access point for military, government, and members of the public to submit aeronautical data and chart changes to NFDC. Changes are submitted via 15 separate online digital forms, including the following:

- o Airport Data Change (Public/Private Use) Form
- o Airport Data Change (Military) Form
- o Aeronautical Chart Change Form
- o Air Traffic Service Airway (Non-Regulatory) Data Form
- o Airport Traffic Control Tower (ATCT) and Terminal Air Traffic Control Facilities Data Form
- o ARTCC, CERAP and CCF Data Form
- o Flight Service Stations (FSS) and Remote Communication Outlets (RCO) Data Form
- o Instrument Landing System (ILS) Data Form
- o Miscellaneous Activity Areas (MAA) Data Form
- o Navigational Aid (NAVAID) Data Form
- o North American Routes Data Form
- o Preferred IFR Routes Data Form
- o Radar Instrument Approach Data Form
- o VGSI/Airport Lighting/RVR Data Form
- o Weather (WX) System Data Form

These forms are accessed here.

Typical Transaction

Forms are restricted based on the type of data being submitted; most are limited to FAA or Military personnel. Two forms, the Airport Data Change (Public/Private) and the Aeronautical Chart Change, are available to the public and are subject to the Paperwork Reduction Act (OMB collection 2120-0754).

NFDC performs data verification and validation on the changes submitted. Once that has been completed, NFDC personnel enter the information into the National Airspace System Resources (NASR) database. NASR is the FAA's official central repository of aeronautical information. The changes are then disseminated to the public at no charge via the National Flight Data Digest (NFDD). The NFDD is accessed here.

To submit any of the above forms, the user must create a user account on the Aeronautical Information Portal. The user accounts contain the following PII:

- o name
- o email address
- o phone number
- o organization
- o position
- o username
- o password.

Users may access and update the PII in their account at any time. Collecting this PII allows NFDC specialists to help verify that the user is an authorized submitter and to contact them in case there are questions or discrepancies in the data being submitted.

An example of a typical transaction might be an FAA Safety Inspector who needs to submit changes to an airport. The Inspector would log onto the Aeronautical Information Portal and go to the home page (*https://nfdc.faa.gov/nfdcApps/controllers/DataController/nfdcHome*) and open the form to create a new Airport Data Change (ADC). The form prepopulates with their contact information (first and last name, email address, phone number). They would then type in the location identifier of the airport and enter the information that is to be added, deleted, or revised. This could be anything pertaining to the airport (runway, communications, navigation aid, or weather information). They would click the "Submit" button and then log out of the Portal.

Another example of a typical transaction might be a flight inspection pilot who is changing the facility restrictions of a navigational aid (navaid). The flight inspection pilot logs onto the Aeronautical Information Portal and go to the home page (*https://nfdc.faa.gov/nfdcApps/controllers/DataController/nfdcHome*). They then select the link to create a new Flight Inspection submission. The form prepopulates with their contact

information (first and last name, email address, phone number). They would then select the "Facility Restrictions" radio button from a list of 10 options, type the identifier of the navaid in question, enter the new, revised, or canceled navaid restrictions, click the "Submit" button, and log out of the Portal.

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[2], 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[3].

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.

The FAA employs various means to ensure the transparency of NFDC operations and data processing. First, during the initial user registration process, NFDC users are presented with a Privacy Act Statement prior to the collection of their PII for system access (labeled as "Aeronautical Information Portal - New User Registration") that details the authority to collect registration information, the purposes for the collection, and any sharing of registration information allowed under the DOT/ALL 13, "*Internet/Intranet Activity and Access Records*," 67 FR 30757 (May 7, 2002) system of records notice. Further, the DOT/ALL 13 SORN details how information may be collected, who it may be collected from, and how it may be used or shared in relation to the access of use of FAA IT systems.

Secondly, users can email the Aeronautical Information Portal Help Desk at 9-awa-ato-aiportal@faa.gov for questions and assistance regarding NFDC functions. Lastly, this PIA

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[2] http://www.cio.gov/documents/FEA-Security-Privacy-Profile-v3-09-30-2010.pdf
[3] http://csrc.nist.gov/publications/drafts/800-53-Appdendix-J/IPDraft_800-53-privacy-appendix-J.pdf

offers the public transparency into NFDC purposes, uses, and processing of PII from its users.

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.

NFDC collects information to help verify the identity of data submitters and to allow FAA personnel to contact them in case there are questions or concerns about their submission. This is done by requiring users to create an online account prior to accessing a data submissions form. The account registration form link is here. FAA promotes individual participation by collecting information for NFDC accounts directly from the individual users. In addition, NFDC users maintain full access to their online account and may make changes to it at any time, or users may contact the Aeronautical Information Portal Help Desk and request assistance in changing their information. For example, a user might contact the Help Desk if they have trouble logging in to the system, or if they need assistance changing their email address, username, or password.

Regarding redress, if a user believes that their information may contain errors or is out of date, users may use the Aeronautical Information Portal to access and correct their information, or else contact the Aeronautical Information Portal Help Desk for assistance.

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.

49 U.S.C. § 329(a) states "The Secretary of Transportation may collect and collate transportation information the Secretary decides will contribute to the improvement of the transportation system of the United States… To the extent practical, the Secretary shall make available to other Government departments, agencies, and instrumentalities and to the public the information collected under this subsection."

To fulfill the requirement to collect and make available aeronautical information, NFDC collects the minimum amount of PII necessary to verify that the aeronautical information submissions it receives come from an authorized source. In addition, NFDC specialists may

use the PII to contact the submitter with follow-up questions or requests for additional information as needed.

NFDC collects, uses, and retains only the PII (name, email address, phone number, organization, and position) that is necessary to 1) verify that the data submissions it receives come from an authorized source and 2) facilitate any follow-up communication to resolve questions, discrepancies, or requests for additional information. NFDC only uses PII for these purposes.

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.

NFDC retains its records according to the approved record retain schedules noted below. Mission Support records related to the HelpDesk are temporary records that are destroyed one year after resolution or when no longer needed for business use, whichever is appropriate, under disposition authority DAA-GRS-2013-0007-0006.

Records pertaining to aeronautical data held within NFDC, such as airport validation files are retained as temporary and transferred to FRC when 4 years old and destroyed five years later or when they are nine years old under the disposition authority of agency records schedule. NC1-237-77-06.

For system -related records, general system management records for system operations and maintenance are retained in NFDC temporarily. These records should be destroyed 3 years after the system activity or transaction is obsolete, completed, terminated, or superseded, but may be retained for a longer period if required for business use, under disposition authority DAA-GRS-2013-0005¬0004.

Finally, NFDC's information security records are maintained temporarily, and destroyed when the business uses ceases under disposition authority, DAA-GRS-2013-0006-0003.

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.

The PII collected by NFDC is only used to verify that the data submitter is an authorized source and to contact them with questions as needed. The PII collected is made available only to authorized FAA and Military users. To have access to a file containing PII, a person

must have a valid FAA PIV card or, for military submissions, be a verified member of the U.S. Military, i.e. have a verified .mil email address. In addition to this, the Portal administrator uses a set of twenty-three different permissions which determine what type of files the user has access to. These permissions determine which forms and workflows a person has access to (including read-only or edit permission); whether they may process military, flight inspection, or survey submissions; whether they are able to generate and view reports; and whether they are able to edit user account information. The Portal administrator assigns these permissions to individuals on an as needed basis.

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).

The FAA employs a combination of processes to ensure the quality and integrity of the PII collected and processed via NFDC. First, the FAA collects account creation information directly from the user. The PII is collected through an interactive menu during portal registration, requiring users to verify their email address by responding to a confirmation email. This PII is entered by the user when they create an account and is assumed to be accurate at the time of collection. The PII is stored securely within the system and only accessed by authorized individuals who use it to resolve data discrepancies or clarify submission details. Further, NFDC users have full control over the PII associated with their account. Users may access and update that information at any time or contact the Aeronautical Information Portal Help Desk and request that it be updated for them. In addition, users may request that their account be deactivated at any time by contacting the Help Desk. FAA accounts are automatically disabled when an individual retires, and their PIV card is deactivated.

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.

The FAA protects PII by 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 System Management Act (FISMA). The safeguards 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, "*Security and Privacy Controls for Information Systems and Organizations, Revision 5*", dated September 2020.

Access to the Data Center is limited to authorized personnel only. Physical access to the Data Center is restricted using a combination of physical and logical access controls (e.g., fences, badge/card readers with keypads, visitor control, closed-circuit TV).

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.

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FAA Order 1370.121B, FAA Information Security and Privacy Program & Policy, implements the various privacy requirements of the Privacy Act of 1974 (the Privacy Act), the E-Government Act of 2002 (Public Law 107-347), DOT privacy regulations, Office of Management and Budget (OMB) mandates, and other applicable DOT and FAA information and information technology management procedures and guidance. In addition to these practices, the FAA will implement additional policies and procedures as needed as they relate to the access, protection, retention, and destruction of PII. Federal employees and contractors who work with ASKME AWC are given clear guidance about their duties as related to collecting, using, and processing privacy data. Guidance is provided in mandatory annual security and privacy awareness training, as well as FAA Order 1370.121B. The FAA conducts periodic privacy compliance reviews of NFDC as related to the requirements of OMB Circular A-130, Managing Information as a Strategic Resource.

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