



U.S. Department of Transportation

Privacy Impact Assessment

Federal Aviation Administration (FAA) Human Resource Management (AHR) FAA Blackboard System (Blackboard)

Responsible Official

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Executive Summary

Blackboard is a web-based learning management system that delivers online courses through the Federal Aviation Administration's (FAA's) Office of Human Resource Management (AHR). Blackboard is authorized under the [Government Employee Training Act \(GETA\), as codified in 5 U.S.C. §§ 4101-4118](#), the [2018 FAA Reauthorization Act, Title VI, Public Law 115-254](#), [49 U.S.C. § 44702, Airport and Airway Development Act of 1970, Public Law 94-353](#); [Section, National and Community Service Act of 1990, 49 U.S.C. § 12501](#).

The FAA developed this Privacy Impact Assessment (PIA) in accordance with the [E-Government Act of 2002 \(E-Government Act\), Pub. L. 107-347 \(Dec. 17, 2002\)](#) because Blackboard collects and maintains Personally Identifiable Information (PII) (contact and course completion information or course, event, or contest registration information) from members of the public including Designees.¹

This is an update to the PIA published on February 21, 2023. The Science Technology Engineering and Math-Aviation and Space Education (STEM-AVSED) Airport Design Challenge (ADC) functionality was removed from the Blackboard security assessment and authorization boundary, and a data exchange with the Designee Management System (DMS), replaced the previous data exchange with the Designee Registration System (DRS).

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.²

¹ Designees individuals, including members of the public, or employees under their supervision in the aviation industry authorized to conduct examinations, perform tests, and issue approvals and certificates on behalf of the FAA

²Office 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).



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.

Introduction & System Overview

Previously, FAA large-scale training for employees and Designees was not possible because training participants were geographically dispersed and due to the large numbers of users that required training, there were not enough in-person training facilities and instructors available to meet the demands for required training. In response to this need, the FAA addressed this issue pursuant to the [Government Employee Training Act \(GETA\)](#), as [codified in 5 USC §§ 4101-4118](#), the [2018 FAA Reauthorization Act, Title VI, Public Law 115-254](#), and [49 USC § 44702](#), which allows the FAA to provide online courses to a much larger number of online learners than it could by conducting classes in person. Blackboard addresses this issue by utilizing Blackboard Learn, which is a web-based Learning Management System (LMS) used for the administration, documentation, tracking, reporting, and delivery of electronic educational technology (e-learning) education courses or training programs for the FAA. Blackboard provides users with a virtual classroom that replaces the traditional in-person classroom environment. Blackboard offers several core abilities, including the capability to create courses, manage and deliver course assessments, provide plagiarism prevention, and allow real-time grading of assignments. The capacity to share, reuse, and discover learning objects offers ease of effort in building courses and engaging students.

These features allow for an easy-to-use interface presented to learners. Blackboard allows users to take long and complex courses that may span several months in an easy-to-use format. Blackboard also allows users to complete coursework on their own schedules instead of sitting through an instructor-led course with set start and end times.



The process for establishing a Blackboard account and accessing and completing Blackboard courses differ based on whether the user is a FAA employee or contractor, or Designee. Blackboard is integrated with the FAA's [Designee Management System \(DMS\)](#), and the Electronic Learning Management System (eLMS) to provide online learners with seamless access to Blackboard online courses.

Blackboard Use by Designees

Under 49 U.S.C. § 44702(d), Designees are individuals or employees under their supervision in the aviation industry authorized to conduct examinations, perform tests, and issue approvals and certificates on behalf of the FAA. Prior to receiving their designation, Designees must navigate to DMS to complete their user profile and must provide their name, email address, phone number³, and pay for their required training.⁴ After a successful payment, DMS sends the Designee's name, email address and phone number to Blackboard via an encrypted Application Programming Interface (API) transmission. Blackboard then electronically transmits an enrollment ID (a system-generated confirmation number) to DMS. The enrollment ID serves as confirmation that a Designee successfully enrolled in an online course via Blackboard.

After creation of the Blackboard user account in DMS, Designees access Blackboard by entering their username and password in DMS and then navigating via web links to Blackboard. Because Designees authenticate through DMS, the access and authentication information is stored in DMS; Blackboard does not collect any of the access and authentication information. Once they log into Blackboard, Designees may complete courses. Blackboard bookmarks the Designees' progress as they complete the online course, allowing Designees who exit prior to the end of online courses to return to where they left off to complete their courses. This bookmarking also allows Blackboard to track the time the Designee spends on the online course, as well as how many times the Designee accesses the online course.

Once course material is completed, Designees may be required to complete additional criteria for course completion, such as an exam or end of course survey. Questions contained at the end of course surveys may be a mix of open-ended questions or ratings using a scale to provide feedback on the content of the course/instructors. Most surveys are anonymous, and do not require Designees to enter names or other identifying

³ For more information on how to create or update a DMS account see:

https://www.faa.gov/other_visit/aviation_industry/designees_delegations/training/der_recurrent/media/update_DMS_profile.pdf

⁴ For additional information regarding the FAA's privacy practices regarding DMS, please see the DMS PIA available at <https://www.transportation.gov/individuals/privacy/pia-designee-registration-system-DMS>.



information. In some instances, surveys may provide the Designees the option to provide their name and email address. Blackboard uses the information gathered via end of course surveys to address questions that the Designee may have about course content.

Blackboard maintains the surveys and course instructors and content owners can review the information collected from the surveys to improve the course content or delivery method. The intent of surveys is not to collect PII or other sensitive information, but to allow Designees to provide feedback on the course they have just finished.

Once a Designee completes the course, the completion status (pass/fail) is recorded in Blackboard and is passed back to DMS, using the Designee's email address and name. The Designee is then able to return to DMS, log in to their DMS profile, and view/print their certificate of completion. The DMS is the FAA's official record of training while the completion status for the Designee remains in Blackboard for three years for historical records.

Blackboard Use by FAA Employees/Contractors

To access Blackboard, FAA employees/contractors navigate to the eLMS at <https://elms.faa.gov/> and authenticate using their Personal Identity Verification (PIV) card. To complete the log on process, Blackboard shares the FAA employees/contractors name and FAA email address with eLMS. Once users are logged into eLMS, they navigate to the link that corresponds with the course they would like to take and accept the Rules of Behavior. At this time, a new web browser session opens, and the course material launches within the browser.

Once FAA employees/contractors complete the course material, they may be required to complete an online survey. The process for completing the online survey is the same process as used for Designees (as explained above). Once an employee/contractor completes the course, the completion status (pass/fail) is sent to eLMS using the employee/contractor's name and email address. After the course is completed, a transcript is created in eLMS using the date of course completion, title of course, and status of course (pass/fail, etc.). The transcript is the FAA's official record of training while the completion status remains in Blackboard for three years for historical purposes.

Transcripts are maintained for three years because many courses are continuations of other courses. Maintaining this information for three years allows students to go back into previously completed courses and review their content.

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) v3⁵, 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 Organizations⁶.

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 multiple means to inform students about how the FAA collects, uses, disseminates, and retains their PII in Blackboard, including a publicly accessible "Rules of Behavior" page (accessible at https://elmsstaging.dot.gov:8080/elms/faa/ahr/rob/acknowledgement_prod.html), which provides additional information about Blackboard.

For both Designees and for FAA employees and contractors, Blackboard maintains copies of training records. For Designees, the FAA's DMS system maintains the official training records, and the [DMS Privacy Impact Assessment \(PIA\)](#) provides additional information about how DMS provides transparency for Designees. DMS training records are subject to [SORN DOT/FAA 830, Representatives of the Administrator, 87 FR 54592 \(September 6, 2022\)](#). Individuals may exercise Privacy Act rights of access and amendment through this SORN. For FAA employees/contractors, the FAA's eLMS is the official system record for employee/contractor training records and are subject to [SORN DOT/ALL 27, Training Programs, 83 FR 60960 \(November 27, 2018\)](#). Individuals may exercise Privacy Act rights of access and amendment through this SORN.

⁵ <https://s3.amazonaws.com/sitesusa/wp-content/uploads/sites/1151/2016/10/FEA-Security-Privacy-Profile-v3-09-30-2010.pdf>

⁶ http://csrc.nist.gov/publications/drafts/800-53-Appendix-J/IPDraft_800-53-privacy-appendix-J.pdf



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.

Under the provisions of the Privacy Act, Designees and FAA employees/contractors may request searches to determine if any records have been added to the Blackboard that may pertain to them. Individuals wishing to know if their records appear in Blackboard as well as individuals wanting to contest information about them that is contained in these systems may inquire in person or in writing to:

Federal Aviation Administration
Privacy Office
800 Independence Avenue (Ave), SW
Washington, DC 20591

The request must include the following information:

- Name,
- Mailing address,
- Phone number and/or email address, and
- A description of the records sought, and if possible, the location of the records.

Individuals may also use the above address to register a complaint or ask a question regarding FAA's privacy practices. If you have comments, concerns, or need more information on FAA privacy practices, please contact the Privacy Division at privacy@faa.gov or 1 (888) PRI-VAC1.

Individual Participation and Redress for Designees

Designee information in Blackboard is obtained from DMS through an information exchange. If need be, Designees may correct or amend their information in DMS, by directly accessing that system to do so. Designees may also contact the FAA's Office of Aviation Safety to update their information. The updated or corrected Designee information would then be shared with Blackboard through a subsequent data exchange.

Individual Participation and Redress for FAA Employees/Contractors

FAA employee and contractor information in Blackboard is obtained from eLMS through a subsequent data exchange. FAA employees/contractors must access eLMS to correct or amend their information. They may also contact the eLMS and Blackboard via email at



elmssupport@faa.gov. The updated or corrected information from FAA employees or contractors will be shared with Blackboard through a subsequent data exchange.

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 is specifically authorized to collect and use the PII of online learners, as described below.

Purpose Specification for the Collection and Use of Designee PII

The following legal authorities authorize the maintenance of Designee PII in Blackboard:

- *Designation of a Designee Authorization:* [49 USC § 44702](#) empowers the Administrator to “...delegate to a qualified private person, or to an employee under the supervision of that person, a matter related to the examination, testing, and inspection necessary to issue a certificate under this chapter; and issuing the certificate.”
- *Designation Authority:* [14 CFR Part 183](#), Representatives of the Administrator, prescribes the requirements for designating private individuals to act as representatives of the Administrator; [14 CFR Part 183.53\(9\)](#) requires the provision of training for Designees.
- *Designee Authority to Act on Behalf of FAA Administrator:* [14 CFR Part 61](#), Certification: Pilots, Flight Instructors, Ground Instructors, and [14 CFR Part 142](#) Training Centers, provides for individuals authorized by the Administrator to conduct functions for the initial competency validation and continued qualification.

DMS is the official system of records for account and course completion information that it exchanges with Blackboard. DMS exchanges the Designee name, email address and phone number, and course completion status with Blackboard, which is consistent with the purposes for which it is collected.

Purpose Specification for Collection and Use of FAA Employee/Contractor PII

The following legal authorities authorize the FAA’s maintenance of FAA employee/contractor PII in Blackboard:

- Training information for FAA employees/contractors is collected and maintained under the provisions of the [Government Employee Training Act \(GETA\)](#), as



[codified in 5 USC §§ 4101-4118](#) which requires Agencies to provide opportunities for training.

- [Executive Order 11348, as amended by Executive Order 12107, Part 3 Sections 301 and 302](#), provides general authority for the provision of training, and therefore, in carrying out this requirement, authorizes the collection of Federal employee and contractor training information.

eLMS is the official system of records for FAA employee and contractor training information that it exchanges with Blackboard. eLMS exchanges the FAA employee and contractor name and FAA email address with Blackboard, which is consistent with the purposes for which it is collected.

The FAA does not use the PII for any other 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.

FAA personnel collects the minimum amount of information from individuals to facilitate online training programs. Records for the primary purpose of the system are maintained and deleted in accordance with following National Archives and Record Administration (NARA) approved General Retention Schedules (GRS). Non-FAA employee (Designee) training records are temporary. The FAA destroys these records when they are 3 years old.⁷ FAA employee and contractor training records are temporary and are destroyed when new superseding records are created, or when 3 years old, or 1 year after leaving employment with the FAA, whichever comes first. The FAA may keep records longer if required for business use.⁸

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 FAA uses and discloses information in accordance with applicable notices, or in accordance with statutory Privacy Act exceptions, if applicable, as detailed below.

Designee Users

⁷ [NARA GRS 2.6, Employee Training Records, approved April 2020, Item 10.](#)

⁸ [NARA GRS 2.6, Employee Training Records, approved April 2020, Item 30.](#)



Blackboard limits the amount of PII collected and maintained in Blackboard to only what is needed to manage, oversee, and document training provided to Designees.

FAA Employee and Contractor Users

The FAA/DOT limits the PII collected in Blackboard for the purpose of providing the required training to DOT employees and contractors.

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).

Blackboard collects, uses, and retains data that is relevant and necessary for the purpose for which it was collected.

Designees

Designees provide their own PII to the Agency when they manually create their DMS profile, which shares the user's name, email address, and phone number with Blackboard. The user can review their profile information as entered for accuracy at that time. Information in Blackboard is updated every 15 minutes from DMS. When an online learner makes a correction in DMS, the change is reflected in Blackboard at the next 15-minute interval. Automating the data exchange between DMS and Blackboard ensures data integrity by avoiding human error.

FAA Employees/Contractors

FAA employees Blackboard user account information is created from a data exchange with the eLMS. FAA contractors' user account is created from a data exchange with the FAA's MyProfile system. Both systems share the user's email address and name with Blackboard. Information from eLMS is updated every three hours. When user information is updated in eLMS, the change will be reflected in Blackboard at the next three-hour interval.

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 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 the [National Institute of Standards and Technology Special Publication \(NIST\) 800-53, Revision 5, Security and Privacy Controls for Federal Information Systems and Organizations, dated September 2020 \(includes updates as of Dec. 10, 2020\)](#). Blackboard undergoes the FAA's annual information systems security Certification and Accreditation (C&A) process.

Blackboard implements administrative, technical, and physical measures to protect PII against loss, unauthorized access, or disclosure. Specifically, Blackboard takes the following steps to safeguard PII: identification and authentication, physical security, roles and permissions, and encryption. Physical security includes physical access and environmental controls for the building that houses the Blackboard servers. Blackboard manages access to information through FAA user roles. All Blackboard users must agree to the Rules of Behavior, which emphasize privacy protective practices, such as not posting PII on Blackboard, before they can access each course. Blackboard also securely transmits online learner information using encryption. The Blackboard user profile webpage, where a student accesses their account, uses an encrypted link between a student's web browser and Blackboard. All online learner information maintained in Blackboard is encrypted.

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 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 consistently implements additional policies and procedures are consistently applied, especially as they relate to the access, protection, retention, and destruction of PII. Federal employees/contractors who work with Blackboard 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, "FAA Information Security and Privacy



Program & Policy,” The FAA conducts periodic privacy compliance reviews of Blackboard as related to the requirements of OMB Circular A-130, “*Managing Information as a Strategic Resource.*”

DOT implements 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 Order 1370.121B implements the various privacy requirements of the Privacy Act, the E-Government Act of 2002 (Public Law 107-347), DOT privacy regulations, OMB mandates, and other applicable DOT and FAA information and information technology management procedures and guidance.

Responsible Official

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System Owner

Approval and Signature

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Office of the Chief Information Officer