



U.S. OFFICE OF SPECIAL COUNSEL
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The Special Counsel

April 13, 2020

The Honorable Elaine L. Chao
Secretary
U.S. Department of Transportation
Office of the Secretary
1200 New Jersey Ave, S.E.
Washington, D.C. 20590

Re: OSC File No. DI-16-2046

Dear Secretary Chao:

Pursuant to my responsibilities as Special Counsel, I am referring to you for investigation a whistleblower disclosure alleging that the Federal Aviation Administration (FAA) has failed to implement and enforce preventative measures to secure the flight decks of passenger aircraft.¹ I have determined that there is a substantial likelihood that the allegations disclose a violation of law, rule, or regulation; as well as a substantial and specific danger to public safety. A report of your investigation, including any remedial actions if warranted, is due to the Office of Special Counsel (OSC) by June 12, 2020.

Specifically, Robert J. MacLean, the whistleblower and former Federal Air Marshal (FAM), who consented to the release of his name, alleges that FAA failed to require aircraft operators to adequately protect the flight deck area on airplanes. The allegations to be investigated include:

- FAA failed to require aircraft operators to implement flight deck doors that open outward and away from the flight deck; and
- FAA failed to require aircraft operators to implement installed physical secondary barrier systems, which function as another layer of protection between the passenger area and the flight deck.

I. Flight Deck Doors

The FAA is responsible for proscribing regulations and minimum safety standards for

¹ I previously referred the whistleblower's allegations to the U.S. Department of Homeland Security on January 18, 2018. Subsequently, I determined that the U.S. Department of Transportation is the appropriate agency to address these allegations.

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procedures that are deemed necessary for aviation safety or national security. *See* 49 U.S.C. §§ 106(g) and 44701(a)(5). The Transportation Security Administration (TSA) is tasked with working in conjunction with FAA concerning any actions or activities affecting aviation safety or air carrier operations. *See* Aviation Act, 49 U.S.C. § 114(f)(3), (13). The Aviation Act charges FAA with developing policies, strategies, and plans for dealing with transportation safety issues. *See* 49 U.S.C. § 44701(a)(5). Because aircraft operators are obligated to properly restrict access to the flight deck (also known as the cockpit), FAA must provide adequate rules to ensure that operators can comply with the regulation. *See* 49 C.F.R. § 1544.237.

According to the whistleblower, FAA has failed to comply with the Aviation Act. Specifically, the whistleblower asserts that all flight decks with inward opening doors remain highly vulnerable to attack because an inward opening door, when unlocked, is ineffective when hit with moderate force. The whistleblower explained that, with an unlocked inward opening door,² an attacker could knock back a standing crew member into the flight deck and the force from the push alone could cause the crew member to fall onto the aircraft's steering and thrust instruments; or, at a minimum, allow the attacker to breach the area by entering the flight deck. The whistleblower asserts that, by contrast, with an outward opening door, the pilot would only need to open the door a few inches to determine whether it was safe to proceed; and it would be easier for the crew member to quickly shut and secure the flight deck door again.

Between November 2015 and February 2016, the whistleblower observed, while on duty, that the following airlines still operated aircraft with inward opening doors: United, American, Delta, Frontier, JetBlue, Hawaiian, Spirit, Frontier, Allegiant, and Alaska. Specifically, the whistleblower observed approximately one aircraft per week with inward opening doors. These aircraft were single-aisle Airbus models A319, A320, and A321, and the wide-body Boeing models B767 and B777.

II. Secondary Barriers in Flight Deck Area

The whistleblower also asserts FAA has failed to require aircraft operators to implement installed physical secondary barrier (IPSB) systems, which are a type of secondary barrier that provides an additional layer of protection between the passenger area and the flight deck. The whistleblower alleges that in most planes, there is only one (inward opening) door between the two areas, which leaves the flight deck susceptible to a potential attack.³

² An inward opening door is a flight deck door that opens away from the forward galley and into the flight deck.

³ On June 9, 2015, the whistleblower testified before Congress and participated in briefings before the Senate Committee on Homeland Security and Governmental Affairs about the benefit of secondary barriers, specifically IPSBs.

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In 2011, the Radio Technical Commission for Aeronautics issued a study entitled, “Aircraft Secondary Barriers and Alternative Flight Deck Security Procedures” (RTCA study).⁴ See Enclosure A, which is a redacted version of the RTCA study. The RTCA study explains that since September 11, 2001, Congress, FAA, and the International Civil Aviation Organization have issued a series of new standards to protect flight decks from intrusion and penetration by small-arms fire. See 14 C.F.R. § 25.795. According to the RTCA study, these new standards resulted in the installation of reinforced flight deck doors on some U.S. and international passenger-carrying air carriers.⁵ These doors provide protection when they remain closed and locked throughout a flight.

The whistleblower explains that, often, the flight deck door cannot remain closed for the entire duration of a trip. At times, the aircraft staff must open the flight deck door so that crew members can inspect aircraft wings, access lavatory facilities, transfer meals, and switch crew positions on longer flights (door transitions). For some door transitions, a flight attendant will switch places with one of the pilots so that there are always two people in the flight deck in the event of an emergency. The additional time needed to make this change significantly increases the window of opportunity for an attacker to breach the flight deck. The whistleblower states that it is during these door transitions that the flight deck becomes vulnerable and that the absence of an additional barrier violates 14 C.F.R. § 121.584(a)(1), which states that no one may unlock the flight deck door unless the area outside the flight deck door is secure. The RTCA study states that installing a secondary barrier is a reliable method for ensuring the flight deck remains secure during door transitions. See Enclosure A.

On April 14, 2015, FAA issued an Advisory Circular (AC), Aircraft Secondary Barriers and Alternate Flight Deck Security Procedures. The AC provided three acceptable methods of secondary flight deck security to include IPSB; improvised non-installed secondary barriers (INSB); and human secondary barriers. The whistleblower states that this circular is lacking because FAA did not mandate compliance, and the use of an INSB (such as a food cart) and a human barrier (such as a flight crew member), are unreliable options. He maintains that an IPSB is the only effective, consistent option for a secondary barrier.

Problems similar to the whistleblower’s allegations have also been previously investigated by the U.S. Department of Transportation’s Office of Inspector General (OIG). On June 26, 2017, the OIG released an audit report entitled “*FAA Has Taken Steps To Identify Flight Deck Vulnerabilities But Needs to Enhance Its Mitigation Efforts.*” In that report, OIG relied

⁴ RTCA is a not-for-profit corporation formed to advance the art and science of aviation and aviation electronic systems for the benefit of the public. The organization functions as a Federal Advisory Committee and develops consensus-based recommendations on contemporary aviation issues. See Enclosure A, *Foreword*.

⁵ Based upon the whistleblower’s observations, it is apparent that a number of flight deck doors on passenger aircraft have not been modified in accordance with the standards identified in the RTCA study.

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upon the RTCA study and concluded that FAA is not effectively mitigating all existing flight deck vulnerabilities and may be missing ways to enhance safety and security through closer collaboration with TSA. In particular, it recommended that aircraft operators be required to “conduct a Safety Risk Assessment ... of their current secondary barrier methods using all information from the 2011 RTCA report on secondary barriers” See Enclosure B, which is a redacted version of the June 26, 2017 OIG report.

Pursuant to my authority under 5 U.S.C. § 1213(c), I have concluded that there is a substantial likelihood that the information provided to OSC discloses a violation of law, rule, or regulation, as well as a substantial and specific danger to public health. Please note that the specific allegations and references to specific violations of law, rule, or regulation are not intended to be exclusive. If, in the course of your investigation, you discover additional violations, please include your findings on these additional matters in the report to OSC. As previously noted, your agency must conduct an investigation of these matters and produce a report, which must be reviewed and signed by you. Per statutory requirements, I will review the report for sufficiency and reasonableness before sending copies of the agency report, along with the whistleblower’s comments and any comments or recommendations I may have, to the President and congressional oversight committees and making these documents publicly available.

Additional important requirements and guidance on the agency report are included in the Appendix, which can also be accessed online at <https://osc.gov/Services/Pages/DU-Resources.aspx>. If your investigators have questions regarding the statutory process or the report required under section 1213, please contact [REDACTED], Chief of the Retaliation and Disclosure Unit, at [REDACTED] for assistance. I am also available for any questions you may have.

As discussed above, your investigative report, including any remedial actions, is due to OSC by June 12, 2020.

Sincerely,



Henry J. Kerner
Special Counsel

Enclosures

cc: Mitch Behm, Acting Inspector General, U.S. Department of Transportation