



U.S. SENATE COMMITTEE ON
COMMERCE, SCIENCE, & TRANSPORTATION

COMMITTEE INVESTIGATION REPORT

AVIATION SAFETY OVERSIGHT

DECEMBER 2020

Prepared by Commerce Committee Majority Staff

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I. Executive Summary

In April of 2019, weeks after the second of two tragic crashes of Boeing 737 MAX aircraft, U.S. Senate Committee on Commerce, Science, and Transportation staff began receiving information from whistleblowers detailing numerous concerns related to aviation safety. Commerce Committee Chairman Roger Wicker directed staff to begin an oversight investigation. The scope and breadth of the investigation quickly expanded beyond the first allegations inspired by the 737 MAX tragedies. Information received from fifty-seven whistleblowers revealed common themes among the allegations including insufficient training, improper certification, FAA management acting favorably toward operators, and management undermining of frontline inspectors. The investigation revealed that these trends were often accompanied by retaliation against those who report safety violations and a lack of effective oversight, resulting in a failed FAA safety management culture.

In support of the committee's investigation, Chairman Wicker sent seven letters, which included thirty specific requests for information to the FAA. To date more than half of the requested information remains unanswered or incomplete. Committee staff have reviewed approximately 13,000 pages of documents over the course of the investigation. Some of the correspondence in response to the Chairman's letters appeared to be contradictory and misleading. As a result of the slow response to document requests, Chairman Wicker requested twenty-one FAA employees be made available for interview by committee staff. Over the twenty month investigation, committee staff were permitted to interview less than half of the employees requested. The documents received and the FAA employee interviews conducted produced inconsistencies, contradictions, and in one case possible lack of candor.

This report details a number of significant lapses in aviation safety oversight and failed leadership in the FAA. The committee is in receipt of many more examples and continues to receive new information from new whistleblowers regularly. Some of the most significant findings include:

- FAA senior managers have not been held accountable for failure to develop and deliver adequate training in Flight Standards despite repeated findings of deficiencies over several decades.
- The FAA continues to retaliate against whistleblowers instead of welcoming their disclosures in the interest of safety.
- The Department of Transportation Office of General Counsel (DOT OGC) failed to produce relevant documents requested by Chairman Wicker as required by the U.S. Constitution Article 1, Section 1.
- The FAA repeatedly permitted Southwest Airlines to continue operating dozens of aircraft in an unknown airworthiness condition for several years. These flights put millions of passengers at potential risk.
- During 737 MAX recertification testing, Boeing inappropriately influenced FAA human factor simulator testing of pilot reaction times involving a Maneuvering Characteristics Augmentation System (MCAS) failure.
- FAA senior leaders may have obstructed a Department of Transportation Office of Inspector General (DOT OIG) review of the 737 MAX crashes.

II. Overview

In April of 2019, weeks after the second of two tragic crashes of Boeing 737 MAX aircraft, Committee staff began receiving information from whistleblowers bringing numerous concerns and disclosures related to aviation safety. The initial disclosures were related to improper training and certification of pilots in new types of aircraft. Chairman Wicker directed staff to begin an investigation.

Over the next twenty months, Committee staff collected and investigated information from fifty-seven whistleblowers. The whistleblowers were from diverse backgrounds and experiences, including government, academia, industry, and the private sector. The overwhelming majority of the whistleblowers proved to be passionate, credible, and articulate in relaying their concerns. A significant number of the whistleblowers worked in the Federal Aviation Administration (FAA), and some had made well-known protected disclosures in the past and even testified before Congress.

Correspondence

In support of the Committee's investigation, Chairman Wicker sent seven letters to the FAA, including document and interview requests in order to gather factual information related to whistleblower claims. In total, Chairman Wicker issued over thirty specific requests, more than half of which have not been answered. Committee staff reviewed approximately 13,000 pages of documents from the FAA. However, some of the correspondence in response to the Chairman's letters at times appeared to be contradictory and misleading. In a September 23, 2019, letter to President Trump, U.S. Special Counsel Henry J. Kerner indicated that, "FAA's official responses to Congress appear to have been misleading in their portrayal of FAA employee training and competency."

Because of the slow response to document requests, Chairman Wicker sent a letter in December of 2019 to FAA Administrator Steve Dickson requesting that twenty-one FAA employees be made available for interview by Committee staff. Over the twenty month investigation, Committee staff were permitted to interview nine employees. Three of the requested employees departed from the FAA after the request for interviews was made but were not made available before their departure.

The documents received and the FAA employee interviews conducted produced inconsistencies, contradictions, and in one case possible lack of candor. However, the totality of the reviewed evidence corroborated and firmly supports the vast majority of whistleblower allegations.

Investigation

Over the course of the Committee's investigation, its scope and breadth expanded significantly. Common themes among the allegations were insufficient training, improper certification, FAA management acting favorably toward operators, and management undermining of frontline inspectors. The investigation concluded that these trends were often accompanied by retaliation against those who report safety violations and a lack of effective oversight, resulting in a failed FAA safety management culture.

Training

Whistleblower disclosures and related documents confirmed that insufficient training for Aviation Safety Inspectors (ASI) has been a concern in the FAA for decades. This report details numerous Inspector General, NTSB, and other reports supporting this fact. Despite FAA acceptance of some recommendations from previous audits and investigations, the concern persists. Training content and quality have diminished over time. In several examples reviewed by the Committee, this lack of training has resulted in improperly certified check airmen, who in turn appear to have issued improper aircraft type ratings to numerous pilots. Many of these ASI's participate on the Flight Standardization Board (FSB) which conduct evaluations and testing, and which contribute to the certification of new aircraft. The Committee's investigation determined some insufficiently trained ASI's participated in the FSB that evaluated the Boeing 737 MAX.

Southwest Airlines

This portion of the Committee's investigation details persistent oversight concerns regarding Southwest Airlines. Challenges in effective oversight of Southwest became national news in 2008, as a result of an Inspector General Report, congressional investigations, and hearings. Ultimately, Southwest was fined over ten million dollars for failing to inspect aircraft for structural cracks and continuing to carry passengers at great risk. This investigation focused on extremely similar circumstances at Southwest.

Between 2013 and 2017, Southwest purchased eighty-eight aircraft from foreign manufactures and put them into service after issuing airworthiness certificates that were predicated on deficient information. These aircraft are referred to as "Skyline" aircraft. Whistleblowers alerted FAA management repeatedly over several years regarding non-compliance and the risk to the flying public. FAA management, including senior leadership, failed to act. Reminiscent of the 2008 revelations, FAA managers failed to support the frontline inspectors and enforce regulations, clearly favoring the airline. Finally, after a briefing of an impending Inspector General report related to the aircraft, the Director of the Office of Audit and Evaluation (AAE) sent a memo on October 24, 2019 urging FAA Administrator Dickson to

ground the remaining uninspected aircraft until the inspections could be completed.¹ Administrator Dickson refused to ground the aircraft as recommended and gave Southwest several more months to finish the inspections that should have been completed before the aircraft ever flew in U.S. airspace.

Oversight

Oversight failures were not limited to commercial passenger airlines. The Committee investigated circumstances surrounding several cargo, charter, and private aviation fatal accidents. Many of these tragedies occurred in Hawai'i. Several deficiencies discovered in FAA commercial airline oversight were also present in this environment. In multiple cases reviewed by Committee investigators, FAA inspectors found non-compliant safety issues and attempted to hold operators accountable. FAA managers often refused to support compliance or enforcement actions, and in some cases they appeared to retaliate against inspectors for doing so. Tragically, these safety concerns were communicated and documented prior to several fatal crashes. In one case, an FAA ASI investigated a fatal accident killing all eleven people on board. The ASI discovered significant maintenance concerns and discrepancies. The ASI included the concerns in his/her findings and requested the immediate revocation of the license of the mechanic responsible for the aircraft's maintenance. The request was sent to FAA legal counsel for review. Ultimately, the license revocation was not supported and the mechanic was recertified two days after a second fatal crash that killed two. A subsequent investigation revealed the same mechanic had performed maintenance on both airplanes, and that he had previously been found to have submitted false paperwork. An NTSB investigation into the crash is ongoing.

Perceived Favoritism of Operators by Management

The majority of whistleblowers who contacted the Committee alleged that FAA management favors operators and does not support frontline inspectors in their performance of diligent oversight. Several whistleblowers provided extensive evidence of communications between FAA managers and operators which clearly supported the perception of "coziness." The issue of coziness between the regulator and the operator is a much-debated concern. In several cases investigated by the Committee, managers overruled inspectors on issues that were clear violations of regulations. When inspectors pushed back, they were investigated and in some cases reassigned. Some inspectors chose to voluntarily be reassigned or accept promotions to other positions because they did not want to be responsible for the outcome of the inappropriate management interference. The Committee investigation concludes the deference to the operator and undermining of inspectors has been destructive to oversight efforts and voluntary reporting programs in the FAA.

The Committee also discovered several instances of former FAA senior managers who left the agency to work in the private sector and directly interact with prior FAA supervisors and

¹ Memorandum, *Action Required. Southwest Airlines Airworthiness Concerns*, October 24, 2019, <https://www.commerce.senate.gov/services/files/489A89CB-6EE1-4906-ABFA-3875F43D6C67>

subordinates in their new positions. One retired FAA senior manager was implicated in 2008 congressional testimony as having directed an FAA employee and congressional witness to destroy notes related to the subject of the hearing. This same retired FAA senior manager served as an executive for the company that provided deficient review of the Southwest Skyline aircraft described above. Another FAA senior manager retired from the FAA in 2016 and now serves as the Senior Director of Regulatory Compliance and Director of Maintenance at Southwest Airlines. A Senior FAA manager with oversight of Southwest Airlines confirmed to the Committee that he previously worked with the Southwest executive and maintains a personal relationship.

Aviation Safety Action Program

The Aviation Safety Action Program (ASAP) is a voluntary reporting program often used by airline pilots. ASAP allows pilots and other employees to report errors without receiving disciplinary enforcement actions when acceptance criteria are met and the reports are accepted by a review Committee. The criteria includes the reported error not being related to criminal activity, substance abuse, controlled substances, alcohol, or intentional falsification. ASAP reports may also not be accepted in the cases of intentional disregard for safety.² The Committee reviewed dozens of cases submitted by whistleblowers that were clearly not admissible to the ASAP program. Despite their articulation of exclusionary criteria, FAA inspectors including ASAP managers, were pressured and coerced by FAA managers to accept the events into ASAP. In some cases reviewed by Committee investigators, it is clear some operators have intentionally misled the FAA and obscured relevant information valuable to inform the proper corrective action. Many Inspectors who refused to acquiesce to operator demands and management pressure were retaliated against, investigated, or reassigned in several cases reviewed by Committee investigators. Often times, the operator was the source of the complaints prompting investigation, and in others, they demanded FAA management remove the inspector.

The 737 MAX

While the tragic 737 MAX crashes prompted several whistleblowers to come forward, and was the genesis of the investigation, the crashes or certification of the 737 MAX was not the focus. Yet, the investigation does suggest factors such as insufficient training and coziness could have contributed to the troubled certification. For example, whistleblowers alleged serious unethical behavior in pilot testing efforts to recertify the 737 MAX. Whistleblowers detailed concerns about human factor assumptions related to pilot reaction times to a runaway stabilizer event and/or faulty Maneuvering Characteristics Augmentation System (MCAS) activation. According to whistleblowers, these assumptions include a four second reaction time to identify a runaway stabilizer event which could be indicative of an MCAS activation. One whistleblower conducted his/her own ad hoc testing in a non-MCAS equipped simulator. The three flight crews

² ASAP Policy and Guidance, Orders and Advisory Circulars, Volume 11 Flight Standards Programs, Chapter 2 Voluntary Safety Programs, (June 16, 2014) *available at*: https://fsims.faa.gov/wdocs/8900.1/v11%20afs%20programs/chapter%2002/11_002_001.pdf

presented with this scenario responded with reaction times to identify the problem in seven, nine, and eleven seconds. The time to complete the corrective action and correct the situation was forty-nine seconds, fifty-three seconds, and sixty-two seconds. In each instance, the simulator ended up in a nose pitch down altitude, but the simulated aircraft was able to recover.

The whistleblower emphasized these tests were completed in a 737-NG simulator, and MCAS was not an available feature or factor in the test scenarios. The whistleblower contends that the result of these tests indicate Boeing's assumed reaction time of four seconds is unrealistic and found actual pilot reaction times were as much as four times the assumed time.

The Committee's investigation discovered that at least one official FAA recertification test event was improperly influenced by Boeing. At least one FAA Aircraft Certification Test Pilot appears to have been complicit in this testing. Slow and incomplete responses to document requests and incomplete interviews have hindered progress on this specific topic. Some of the delays are due to conflict with ongoing criminal investigations. Therefore, it is impossible to determine how much of the systemic training, oversight, and management intervention problems detailed in this report may have contributed to the certification of the 737 MAX.

Audit and Evaluation

The FAA Modernization and Reform Act included a provision for the creation of the Aviation Safety and Whistleblower Investigation Office as a result of whistleblower complaints, Department of Transportation's Office of Inspector General (DOT OIG) audits, and congressional oversight. Prior to enactment, the FAA had designated the Office of Audit and Evaluation (AAE) to coordinate audits and investigate aviation safety complaints. After enactment of the Act, the FAA convinced Congress to allow AAE in its current form to fulfill the intent of the Act. Note: the AAE does not have the word "whistleblower" or "investigation" in its title. According to the office's webpage, "AAE is a staff office that reports directly to the FAA Administrator and provides an independent venue for the conduct or oversight of objective, impartial investigations and evaluations."

The Committee investigation concludes AAE does not necessarily conduct independent, objective, or impartial investigations and evaluations. Often, AAE refers complaints, including whistleblower complaints, back to the very line of business against which the complaint is alleged. This is counterintuitive to any interpretation of objective oversight and is clearly deficient today. Based on the review and information received from whistleblowers and staff interviews, AAE often also fails to independently investigate waste, fraud, abuse, or mismanagement. According to FAA employee interviews and cases reviewed by Committee investigative staff, these type of complaints are often referred to the FAA Office of Security and Hazardous Materials (ASH).

The Committee has determined AAE was implemented with insufficient resources, which remains the case today. Specifically, inadequate staffing requires the referral of whistleblower safety disclosures to FAA lines of business, defeating the value and congressional intent of an independent Aviation Safety Whistleblower Investigation Office. As of the time this report was

being drafted, the Committee had not yet received the 2019 AAE Annual report required, “no later than October 1 of each year” by the 2012 FAA Modernization and Reform Act.³ While it is common for such a report to be received thirty to sixty days after its due date, one year late is inexcusable.

Legislation

On September 10, 2020, the Senate Committee on Commerce, Science, and Transportation (CST) introduced the FAA Accountability Enhancement Act, S.4565. On November 18, 2020, the Act was added to the Aircraft Safety and Certification Reform Act of 2020, S. 3969, and was voted favorably out of Committee. In its final form, the Act would establish a Whistleblower Ombudsman within the FAA, rename the Office of Audit and Evaluation as the Office of Whistleblower Protection and Aviation Safety Investigations, and enable the newly renamed office to investigate claims of whistleblower retaliation. These key provisions of the FAA Accountability Enhancement Act may be included in the Omnibus legislative vehicle, which is expected to pass the House and Senate in the coming days. This legislation is representative of bi-partisan efforts supported by contributions of courageous whistleblowers and dedicated FAA employees. Chairman Wicker believes this legislation would provide for significant enhancements to accountability, aviation safety, and whistleblower protection.

³ FAA Modernization and Reform Act of 2012, (Feb. 14, 2012) *available at*: <https://www.congress.gov/112/plaws/publ95/PLAW-112publ95.pdf>

III. Table of Acronyms

Acronym	Description
AAE	Office of Audit and Evaluation
AAM	Office of Aerospace Medicine
ACO	Aircraft Certification Office
AD	Airworthiness Directive
AED	Aircraft Evaluation Division
AEG	Aircraft Evaluation Group
AFB-1	Office of Foundational Business
AFC-1	Office of Air Carrier Safety Assurance
AFG-1	Office of General Aviation Safety Assurance
AFS-1	Office of Safety Standards
AIR	Aircraft Certification Service
ALPA	Air Line Pilots Association
AOA	Angle of Attack
AOV	Air Traffic Safety Oversight Service
APD	Aircrew Program Designee
AQS	FAA Office of Quality, Integration and Executive Services
ARM	FAA Office of Rulemaking
ASAP	Aviation Safety Action Program
ASH	FAA Office of Security and Hazardous Materials
ASI	Aviation Safety Inspector
ASRS	Aviation Safety Reporting System
ATOS	Air Transportation Oversight System
ATS	Air Traffic Service
AVP	Office of Accident Investigation and Prevention
AVS	FAA Office of Aviation Safety
CAMP	Continuous Airworthiness Maintenance Program
CEPO	Certification Evaluation Program Office
CFR	Code of Federal Regulations
CHEP	Certificate Holder Evaluation Process
CMO	Certificate Management Office
CST	United States Senate Committee on Commerce, Science, and Transportation
DAR	Designated Agency Representatives
DOT	Department of Transportation
EET	Extended Envelope Training
EMAS	Engineered Material Arresting System
ERC	Event Review Committee
ERT	Emergency Response Team
FAA	Federal Aviation Administration

FCOM	Flight Crew Operations Manual
FLM	Front Line Manager
FOQUA	Flight Operational Quality Assurance
FS	Flight Standard Service
FSB	Flight Standardization Board
FSDO	Flight Standards District Office
GAO	Government Accountability Office
JATR	Joint Authorities Technical Review
LOB	Line of Business
MCAS	Maneuvering Characteristics Augmentation System
MSAD	Monitor Safety/ Analyze Data
MSPB	Merit Systems Protection Board
NTSB	National Transportation Safety Board
NTSC	National Transportation Safety Committee
OAWP	Office of Accountability and Whistleblower Protection
ODA	Organization Designation Authorization
ODAR	Organizational Designated Airworthiness Representative
OIG	Office of Inspector General
OGC	Office of General Counsel
OJT	On-the-Job Training
OSC	Office of Special Counsel
PAI	Principle Avionics Inspector
PASS	Professional Airway System Specialist
PIC	Pilot in Command
PMI	Principle Maintenance Inspector
POI	FAA Principal Operations Inspector
PRD	Pilot Record Database
PWB	Performance Weight and Balance
ROI	Reports of Investigation
SAS	Safety Assurance System
SME	Subject Matter Expert
SMS	Safety Management System
SRA	Safety Risk Analysis
SWA	Southwest Airlines
USAF	United States Air Force
VDRP	Voluntary Disclosure Reporting Program
VSRP	Voluntary Safety Reporting Program

IV. Findings

- The Aviation Safety and Whistleblower Investigations Office directed as part of the 2012 FAA Modernization and Reform Act was not fully implemented and remains insufficient.
- Senior managers in FAA Flight Standards may lack technical knowledge and experience to effectively lead aviation safety regulatory oversight programs.
- Acting-Administrator Elwell's response to Chairman Wicker's letter was misleading.
- Committee interviews of FAA employees revealed conflicting statements about a claimed Flight Standardization Board (FSB) work stoppage, and no one interviewed could confirm whether the work stoppage asserted by then Acting Administrator Elwell actually took place.
- An FAA Aviation Safety Inspector (ASI) may have lacked candor when asserting they completed all FSB ground training prior to receiving a check ride and subsequent type rating for the Gulfstream VII.
- FAA has not consistently communicated its oversight and enforcement role, especially with regard to voluntary reporting programs.
- FAA continues to retaliate against whistleblowers instead of welcoming their disclosures in the interest of safety.
- FAA conduct of investigations appear to be inconsistent, lack objectivity and diligence while providing opportunity for abuse and retaliation.
- During 737 MAX recertification testing, a Boeing employee inappropriately influenced FAA human factor simulator testing of pilot reaction times involving a Maneuvering Characteristics Augmentation System (MCAS) failure.
- FAA Aircraft Certification Office (ACO) test pilots were complicit in skewing human factor simulator testing to support erroneous pilot reaction time to runaway stabilizer reaction time assumptions of Boeing.
- The Department of Transportation Office of General Counsel (DOT OGC) failed to produce relevant documents requested by Chairman Wicker as required by the U.S. Constitution Article 1 Section 1.⁴

⁴ Cornell Law School, Legal Information Institute, "U.S. Constitution, Article 1," <https://www.law.cornell.edu/constitution/article1>

- The DOT OGC improperly redacted information in produced documents, hindering the Committee's oversight investigation.
- FAA senior leaders may have obstructed a Department of Transportation Office of Inspector General (DOT OIG) review of the 737 MAX crashes.
- Operators intentionally file Aviation Safety Action Program (ASAP) reports which do not meet the requirements of the ASAP program.
- FAA management is complicit in accepting ASAP events which are not eligible as defined by program parameters.
- Acceptance of intentional acts and other forbidden ASAP events may obscure safety trends from analysis while not holding operator employees accountable.
- ASAP data was not effectively collected and analyzed by the FAA.
- Commercial airlines and other operators appeal to FAA managers to influence the Event Review Committee (ERC) acceptance decisions, thereby undermining the integrity and value of the ASAP program.
- FAA improperly allowed a Part 135 Helicopter company in Hawai'i to operate under Part 91.
- FAA improperly granted check airman authority under Part 135 to the owner/operator of Novictor Helicopter in violation of 14 CFR Part 119.71.
- FAA management is reluctant in many cases to listen to inspectors and support requested compliance and enforcement actions.
- An FAA ASI was issued a new type rating without having completed the required training.
- Thousands of type rating check rides may have been conducted by improperly trained and certified Aviation Safety Inspectors, potentially rendering them invalid.
- FAA senior managers have not been held accountable for failure to develop and deliver adequate training in Flight Standards despite repeated findings of deficiencies over several decades.

- The FAA repeatedly permitted Southwest Airlines to continue operating dozens of aircraft in an unknown airworthiness condition for several years. These flights put millions of passengers at potential risk.
- Southwest Airlines successfully exerts improper influence on the FAA to gain favorable treatment related to regulatory compliance and voluntary reporting programs.
- FAA appears to select managers in the Southwest Airlines Certificate Management Office (CMO) who lack reasonable experience and do not provide effective regulatory compliance or enforcement.
- FAA managers undermine Aviation Safety Inspectors and in some cases retaliate against them for conducting diligent oversight and making protected safety disclosures.
- The FAA has failed to hold employees accountable for lapses in oversight of Southwest Airlines.
- The FAA has failed to hold employees accountable for lapses in oversight and certification of the 737 MAX.

V. Introduction

The Senate Committee on Commerce, Science, and Transportation's investigation of aviation safety oversight began in April 2019 after receiving whistleblower disclosures about improper training and certification of Federal Aviation Administration (FAA) Aviation Safety Inspectors (ASI). Over the course of the investigation the Committee received additional disclosures from over fifty whistleblowers. The Committee made three separate formal requests for documents from the FAA, and requested twenty-one FAA employee interviews to gain factual information related to whistleblower allegations. All document requests, responses, and interview arrangements throughout the investigation have been managed by the Department of Transportation Office of General Counsel (DOT OGC).

The Committee has been unable to effectively engage directly with the FAA on document requests or related questions, despite repeated requests and assurances, due to DOT OGC intervention. The Committee has asked repeatedly for an accounting of document productions provided to the Committee, including what the production responds to and whether the response is complete, which DOT OGC staff initially agreed to do. However, after repeated requests by Committee staff, DOT OGC staff has refused to provide the information, stating it is not their responsibility to provide detailed accounting for their document productions.

To date, the Committee has received responses to half of the requested items totaling approximately 13,000 pages. It has been seventeen months since the initial request and nine months since the most recent request on March 11, 2020.

Of the twenty-one employees requested to be interviewed, only nine have been made available. Three of them have separated from the agency while the Committee request to interview them was outstanding. The level of cooperation by the FAA and DOT has been unacceptable and at times has bordered on obstructive.

This lack of cooperation by DOT and FAA has significantly delayed the progress of the Committee's investigation. Nevertheless, the Committee continues to receive an increasing amount of information from whistleblowers. In fact, new whistleblowers have continued to come forward as this report was being drafted. Despite the apparent obstruction by DOT and FAA, the Committee has successfully gathered sufficient evidence to make numerous findings and recommendations detailed in this report. In some cases, the Committee has requested the DOT OIG investigate further. The Committee will remain engaged on outstanding issues and continue to refer additional matters to the DOT OIG and other agencies as appropriate.

A. The Federal Aviation Administration

Created by the Federal Aviation Act of 1958, the FAA has a broad mandate to oversee both air and space transportation. Headquartered in Washington, D.C., the FAA's continued mission is to provide the safest and most efficient aerospace system in the world.⁵ The FAA's Office of Aviation Safety Division (AVS) is responsible for certification and safety oversight of approximately 7,300 U.S. commercial airlines and air operators. AVS is also responsible for civil flight operations, developing regulations, and certification of all operational and maintenance enterprises in domestic civil aviation.⁶

Contained within AVS are eight different offices including the Flight Standards Service (FS), the Office of Quality, Integration and Executive Services (AQS), the Office of Rulemaking (ARM), the Air Traffic Safety Oversight Service (AOV), the Office of Aerospace Medicine (AAM), the Office of Accident Investigation and Prevention (AVP), and the Aircraft Certification Service (AIR).⁷ Together these offices certify new types of aircraft, oversee training of pilots, and continually ensure the ongoing safety of commercial airline operations.

Certification and oversight of airmen, air operators, air agencies, and designees are carried out by the FS. FS consists of four offices: the Office of Air Carrier Safety Assurance (AFC-1), the Office of General Aviation Safety Assurance (AFG-1), the Office of Safety Standards (AFS-1), and the Office of Foundational Business (AFB-1). AFC-1 is responsible for certification and oversight activities for aviation entities conducting operations under 14 CFR Part 121, the regulation that governs the certification process for domestic air carriers.⁸ The office oversees twenty-nine Certificate Management Offices (CMO) throughout the country, and each CMO is dedicated to managing the certification of specific carriers or all carriers under a designated region. AFG-1 directs seventy-seven Flight Standards District Offices (FSDO) that oversee certification of all non-14 CFR Part 121 operations. This includes general aviators, foreign air carriers, and charter operations. Together AFC-1 and AFG-1 form a network of regional offices that provide local, on-the-ground certification and oversight of the U.S. aerospace industry.

The Organization Designation Authorization (ODA) program works in tandem with flight standards offices to facilitate certification as well.⁹ The program allows the FAA to delegate to a qualified person or organization the authority to conduct examinations, perform tests, and issue

⁵ U.S. Department of Transportation, Federal Aviation Administration, "Safety: The Foundation of Everything We Do," last modified November 6, 2019, https://www.faa.gov/about/safety_efficiency/.

⁶ U.S. Department of Transportation, Federal Aviation Administration, "Aviation Safety (AVS)," last modified June 15, 2020, https://www.faa.gov/about/office_org/headquarters_offices/avs/.

⁷ U.S. Department of Transportation, Federal Aviation Administration, "Aviation Safety (AVS)—Offices," last modified July 7, 2020, https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/.

⁸ U.S. Department of Transportation, Federal Aviation Administration, "Office of Air Carrier Safety Assurance," last modified September 2, 2020, https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afc/.

⁹ Memorandum, "Policy clarification to Order 8100.15, Organization Designation Authorization," from Susan J. M. Cabler, Manager, Design, Manufacturing & Airworthiness Division, AIR-100 (Washington, DC: Federal Aviation Administration, 2017), [https://rgl.faa.gov/Regulatory_and_Guidance_Library/rgPolicy.nsf/0/7cc6a4db052d9c44862581470077f3d9/\\$FILE/AIR-100-17-160-PM05.pdf](https://rgl.faa.gov/Regulatory_and_Guidance_Library/rgPolicy.nsf/0/7cc6a4db052d9c44862581470077f3d9/$FILE/AIR-100-17-160-PM05.pdf).

approvals and certificates on behalf of the FAA. The ODA program is authorized under 49 U.S.C 44702(a).¹⁰

The Aircraft Evaluation Group (AEG) is a part of the AIR. For Evaluation and Certification of large jets and propeller aircrafts, the FAA establishes a Flight Standardization Board (FSB). The FSB is overseen by the AEG and consists of operations specialists from the AEG, operations inspectors from the relevant CMO, representatives from the AFS-1, and technical advisors from other AEG offices as necessary. The FSB has a number of responsibilities, one of which is to establish pilot type ratings for new aircraft. Pilot type ratings are authorizations to fly specific aircraft. FSB participants evaluate and recommend training requirements for these type ratings based on the characteristics of the aircraft in question. The FSB also conducts the initial training for the manufacturer's pilots and FAA inspectors, and will publish recommendations for FAA inspectors' use in approving an operator's training program.

B. History of Safety Concerns in the FAA

Since 1997, the risk of a fatal commercial aviation accident has dropped approximately 94 percent.¹¹ However, major fatal incidents involving commercial aircraft still happen. For example, in 2009 Colgan Air Flight 3407 crashed killing forty-nine people, and in 2000 Alaska Airlines Flight 261 crash, resulting in the deaths of eighty-eight people. In 2017, Southwest Airlines Flight 1380 experienced an in-flight engine failure that led to one fatality.

Two of the most recent and aviation disasters were the Lion Air Flight 610 crash on October 29, 2018, and the Ethiopian Airlines Flight 302 crash on March 10, 2019, both of which involved Boeing 737 MAX aircraft. A new feature called the Maneuvering Characteristics Augmentation System (MCAS) was implicated as a factor in both tragedies.¹² Over the past two years, the Committee has received numerous whistleblower disclosures regarding these incidents and the development and certification process behind the Boeing 737 MAX aircraft.

While safety is top priority at the FAA, the 737 MAX crashes have caused numerous government oversight and investigative bodies to raise a number of concerns regarding specific FAA policies and programs in support of aviation safety. Of particular interest is management culture, lapses in oversight, and improper relationships between FAA employees and operators.

¹⁰ 49 U.S.C. 44702(a),

<https://uscode.house.gov/view.xhtml?path=/prelim@title49/subtitle7/partA/subpart3/chapter447&edition=prelim>.

¹¹ U.S. Congress, Senate, Committee on Commerce, Science, and Transportation, Subcommittee on Aviation and Space, *The State of Airline Safety: Federal Oversight of Commercial Aviation: Hearing Before the Committee on Commerce, Science, and Transportation*, 116th Cong., 1st sess., March 27, 2019 (testimony of Daniel Elwell, Acting Administrator, Federal Aviation Administration), webcast at:

<https://www.commerce.senate.gov/services/files/1454ADDB-047F-444F-BEDE-DC9413D6D141>.

¹² David Schaper and Braktkton Booker, "Ethiopian Officials Say Faulty Boeing Software Played Role in Deadly 737 Max Crash," *NPR*, March 9, 2020, <https://www.npr.org/2020/03/09/813740173/ethiopian-officials-say-faulty-boeing-software-played-role-in-deadly-737-max-cra>.

Government Accountability Office

Fundamental concerns about the quality of oversight, many of which are rooted in the inadequate level of training for key safety oversight positions within the FAA, go back as far as 1989. In that year, the Government Accountability Office (GAO) issued a report titled, *FAA Aviation Safety Inspectors Are Not Receiving Needed Training*.¹³ The report found that for a 6 month period in 1988, only 37 percent of active ASI's had received the required training. As a result of the GAO report, the FAA opened and staffed an office to oversee training.

In 2005, another GAO report, using a series of FAA employee surveys, found that approximately half of FAA's safety inspectors think that they have the technical knowledge required to effectively do their jobs.¹⁴ As a result of this report, the FAA created two DVD training courses and a web-based training course. The FAA also instituted additional guidance for training implementation following a GAO-recommended feasibility study on the subject.

On October 30, 2013, the House Committee on Transportation and Infrastructure's Aviation Subcommittee held a hearing titled, "Review of FAA's Certification Process: Ensuring an Efficient, Effective, and Safe Process."¹⁵ During this hearing, multiple experts testified to a lack of effective oversight being exercised by the FAA. Dr. Gerald Dillingham, Director of Physical Infrastructure Issues at the Government Accountability Office, testified that, "when faced with the certification of new aircraft or equipment, FAA staff have not been able to keep pace with industry changes, and thus may struggle to understand the aircraft or equipment they are tasked with certification."¹⁶ Michael Perrone, President of the Professional Aviation Safety Specialists, testified that, "the balance of FAA oversight is insufficient."¹⁷

In 2014, GAO released another report addressing the training of FAA inspectors. The report stated, "Representatives from nine of the twenty stakeholders GAO interviewed cited concerns that FAA inspectors may not be adequately trained to oversee Safety Management System (SMS) activities" at US carriers.¹⁸ As a result of this report, the FAA instituted increased SMS training for its inspectors.

¹³ U.S. Government Accountability Office, *FAA Aviation Safety Inspectors Are Not Receiving Needed Training*, GAO/RCED-89-168 (Washington, DC, 1989), <https://www.gao.gov/assets/220/211750.pdf>.

¹⁴ U.S. Government Accountability Office, *FAA Management Practices for Technical Training Mostly Effective; Further Actions Could Enhance Results*, GAO-05-728 (Washington, DC, 2005), <https://www.gao.gov/assets/250/247645.pdf>.

¹⁵ U.S. Congress, House of Representatives, Committee on Transportation and Infrastructure, *Review of FAA's Certification Process: Ensuring an Efficient, Effective, and Safe Process: Hearing before the Subcommittee on Aviation of the Committee on Transportation and Infrastructure*, 113th Cong, 1st sess., October 30, 2013, <https://www.govinfo.gov/content/pkg/CHRG-113hhrg85301/pdf/CHRG-113hhrg85301.pdf>.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ U.S. Government Accountability Office, *Additional Oversight Planning by FAA Could Enhance Safety Risk Management*, GAO-14-516 (Washington, DC, 2014), <https://www.gao.gov/assets/670/664402.pdf>.

Department of Transportation Office of Inspector General

In 2008, FAA whistleblower Bobby “Charalambe” Boutris, alleged that Southwest Airlines had violated an FAA Airworthiness Directive (AD) requiring fuselage inspections that affected forty-six aircraft. According to a DOT OIG report, Southwest notified the FAA of the violation the day after it was discovered, but the FAA allowed the airline to continue operating the affected aircraft for 1,451 flights over eight days, carrying an estimated 145,000 passengers.¹⁹ DOT OIG estimated that, in total, the aircraft flew in violation of the AD for up to nine months, carrying over six million passengers. When inspectors finally inspected the aircraft, they found significant, dangerous fuselage cracks on five of the planes.

In its report, DOT OIG attributed this lapse in oversight to three significant concerns about the FAA’s aviation safety system. First, DOT OIG found that the FAA had an “overly collaborative” relationship with Southwest Airlines and that the FAA permitted Southwest Airlines to repeatedly self-disclose AD violations without ensuring that Southwest Airlines had fixed the underlying issue, which is required following air carrier self-disclosures.²⁰

Second, DOT OIG attributed the lapse in oversight to deficiencies in the FAA’s national oversight system, called the Air Transportation Oversight System (ATOS). ATOS was introduced in 1998, partially in response to the 1996 ValuJet Flight 592 crash that resulted in 110 fatalities. ATOS marked a shift away from inspection-based safety systems toward data-driven ones. ATOS stressed FAA oversight of air carriers’ internal safety systems and procedures, instead of FAA implementing those procedures themselves. A 2002 DOT OIG report cited a shortage of inspectors to physically inspect every aircraft as important to the development of ATOS.²¹ DOT OIG noted that multiple missed ATOS inspections had allowed AD compliance issues to go undetected for years, despite whistleblower concerns dating back to 2003.

Third, DOT OIG found weaknesses in FAA’s processes for internal reviews and in its protections for whistleblowers. After one internal FAA whistleblower disclosed concerns to the FAA, a hotline complaint later attributed to a Southwest Airlines representative was lodged against them, and they were removed from oversight duties for five months pending an investigation into the complaint. Meanwhile, the inspector who admitted to allowing Southwest Airlines to continue violating the AD remained in an oversight role. Another whistleblower, an

¹⁹ U.S. Department of Transportation, Office of Inspector General, *Review of FAA’s Safety Oversight of Airlines and Use of Regulatory Partnership Programs*, AV-2008-057 (Washington, DC, 2008), https://www.oig.dot.gov/sites/default/files/SWA_Report_Issued.pdf.

²⁰ U.S. Congress, Senate, Committee on Appropriations, Subcommittee on Transportation, Housing and Urban Development, and Related Agencies, *An Examination of the Federal Aviation Administration’s Safety and Modernization Performance: Hearing Before a Subcommittee of the Committee on Appropriations*, 110th Cong., 2d sess., April 17, 2008 (prepared statement of Hon. Calvin L. Scovel III, Inspector General, U.S. Department of Transportation), https://www.oig.dot.gov/sites/default/files/WEB_FILE_IG_Statement_on_Safety_and_Modernization.pdf.

²¹ U.S. Congress, House of Representatives, Committee on Transportation and Infrastructure, Subcommittee on Aviation, *Adequacy of FAA Oversight of Passenger Aircraft Maintenance: Hearing Before the Subcommittee on Aviation of the Committee on Transportation and Infrastructure*, 107th Cong., 1st sess., April 11, 2002 (prepared statement of Alexis M. Stefani, Assistant Inspector General for Auditing, U.S. Department of Transportation, Office of Inspector General), <https://www.oig.dot.gov/sites/default/files/cc2002146.pdf>.

experienced inspector, was assigned to office duties following a complaint from the airline. As a result of this finding, DOT OIG recommended that the FAA establish an independent organization within the agency to investigate whistleblower disclosures. This recommendation in part led to the creation of a whistleblower investigation office as part of the FAA Modernization and Reform Act of 2012.

As a result of its investigation, the DOT OIG issued eight recommendations for the FAA.²² The FAA generally agreed with all but two of the recommendations which would have rotated supervisory inspectors between carriers to combat coziness and would have established an independent organization to investigate safety issues identified by FAA employees. The FAA cited budget constraints for disagreeing with these recommendations. It also stated that it had an existing office, the Aviation Safety Reporting System (ASRS), which purported to provide an avenue for employees to resolve safety issues without fear of reprisal, thus negating the need for an independent organization as outlined in recommendation eight. DOT OIG stated that the FAA's position was "unacceptable" and urged the agency to reconsider it in the interest of safety.²³

The 2008 DOT OIG report was not the first to outline concerns about the FAA's ATOS system, nor was it the last. Previously, DOT OIG released a report in 2002 with nearly the same findings, detailing persistent oversight issues related to poor implementation of the Air Transportation Oversight System (ATOS).²⁴ The FAA agreed to strengthen national oversight and appointed a new Director of Flight Standards. The DOT OIG contended that these actions were inadequate and did not improve ATOS implementation. Three years later, DOT OIG released another report with similar findings including that ATOS implementation was lacking and inconsistent across carriers.²⁵ The report found that 26 percent of planned ATOS inspections were not completed. Once again, DOT OIG recommended that the FAA strengthen its national oversight and accountability, and once again the DOT OIG reported that the FAA did not fully address its recommendations. A third report in 2010 found continued problems with ATOS implementation and contained seven recommendations for the reform of ATOS processes to, again, make FAA oversight consistent and sufficient. Six out of the seven DOT OIG recommendations were not heeded to DOT OIG's satisfaction.²⁶

²² U.S. Department of Transportation, Federal Aviation Administration, *Review of FAA's Safety Oversight of Airlines and Use of Regulatory Partnership Programs*, AV-2008-057 (Washington, DC, 2008), https://www.oig.dot.gov/sites/default/files/SWA_Report_Issued.pdf.

²³ Ibid.

²⁴ U.S. Congress, House of Representatives, Committee on Transportation and Infrastructure, Subcommittee on Aviation, *Adequacy of FAA Oversight of Passenger Aircraft Maintenance: Hearing Before the Subcommittee on Aviation of the Committee on Transportation and Infrastructure*, 107th Cong., 1st sess., April 11, 2002 (prepared statement of Alexis M. Stefani, Assistant Inspector General for Auditing, U.S. Department of Transportation, Office of Inspector General), <https://www.oig.dot.gov/sites/default/files/cc2002146.pdf>.

²⁵ U.S. Department of Transportation, Office of the Secretary of Transportation, Office of Inspector General, *Safety Oversight of an Air Carrier Industry in Transition*, AV-2005-062 (Washington, DC, 2005), <https://www.oig.dot.gov/sites/default/files/av2005062.pdf>.

²⁶ U.S. Department of Transportation, Office of Inspector General, *Semiannual Report to Congress October 1, 2009-March 31, 2010* (Washington, DC, 2010), https://www.oig.dot.gov/sites/default/files/DOT_Semiannual%20Report%20Oct%202009-March%202010.pdf.

National Transportation Safety Board

Following the 1997 Fine Airlines Flight 101 crash that killed four people, the National Transportation Safety Board (NTSB) issued a recommendation that the FAA incorporate a feature into ATOS that would allow the system to learn from oversight shortcomings and adapt to evolving safety environments.²⁷ In 2007, FAA's then-Acting Administrator Robert Sturgell responded, outlining the improvements made to ATOS, but noted that "it is the air carrier's responsibility to identify its systemic deficiencies, if they exist, and to correct them before they cause accidents."²⁸ NTSB responded by calling the ATOS improvements inadequate and reminding the FAA that, instead of the carrier's responsibility, it is the FAA's responsibility to identify systemic safety problems at a carrier and to ensure that these problems are resolved. The recommendation was closed in 2009 and classified as an "unacceptable response" from the FAA.

C. Whistleblowers

Whistleblowers play an indispensable role in holding our government accountable. The Whistleblower Protection Act of 1989,²⁹ the Whistleblower Protection Enhancement Act of 2012,³⁰ and several other laws, regulations, and policies, ensure civilian federal employees are protected from many forms of retaliation when disclosing information that the employee reasonably believes is evidence of a violation of law, gross mismanagement and gross waste of funds, abuse of authority, or a substantial and specific danger to public health.³¹ Communication of these disclosures to Congress is protected by the rules of the Senate and the House of Representatives. As previously noted, FAA whistleblower disclosures to Congress in 2008 led to the creation of the Aviation Safety Whistleblower Investigation Office, currently implemented as the Office of Audit and Evaluation (AAE), which is directed to independently investigate whistleblower safety complaints claims within the FAA.

Culture of Retaliation

From 1993-1997, Mary Rose Diefenderfer served as the FAA Principal Operations Inspector (POI) at the Seattle FSDO, which has responsibility for oversight of Alaska Airlines. She was promoted to this position after Robert Lloyd, the previous POI, was transferred to another office. This transfer came soon after he was warned by his FAA manager to "stop sending so many enforcement letters to Alaska Airlines."³² In August 1993, Diefenderfer

²⁷ National Transportation Safety Board, *Safety Recommendation A-98-051* (Washington, DC, 2009), https://www.nts.gov/_layouts/ntsb.recsearch/Recommendation.aspx?Rec=A-98-051

²⁸ National Transportation Safety Board, *Aircraft Accident Report* (Washington, DC, 1997), https://reports.aviation-safety.net/1997/19970807-0_DC86_N27UA.pdf.

²⁹ *Whistleblower Protection Act of 1989*, Public Law 101-12 (1989), <https://www.govinfo.gov/content/pkg/STATUTE-103/pdf/STATUTE-103-Pg16.pdf>.

³⁰ *Protection of Certain Disclosures of Information by Federal Employees*, Public Law 112-199 (2012), <https://www.govinfo.gov/content/pkg/PLAW-112publ199/pdf/PLAW-112publ199.pdf>.

³¹ *Whistleblower Protection Act of 1989*, Public Law 101-12 (1989), <https://www.govinfo.gov/content/pkg/STATUTE-103/pdf/STATUTE-103-Pg16.pdf>.

³² *Diefenderfer v. Peters*, C08-958Z (W.D. Washington, June 29, 2009).

discovered that Alaska Airlines had falsified training records. She conducted an investigation that led to a Civil Aviation Security investigation which confirmed her discovery. According to Diefenderfer, FAA Security warned her that the FAA was displeased with her findings. Three months later, Diefenderfer was forcibly reassigned to another office. After complaining to the U.S. Office of Special Counsel (OSC), an investigative team was sent to the Seattle FSDO. Upon the completion of that investigation, Diefenderfer was reinstated to her position as POI. In 1997, Diefenderfer again reported that Alaska Airlines continued to fly planes with known mechanical deficiencies and continued falsifying records. She was again removed from her post as POI and transferred to another office. Diefenderfer left the FAA in November 1999 after applying for and being turned down for a number of other positions within the agency.

On January 31, 2000, Alaska Airlines Flight 261 crashed into the Pacific Ocean about 2.7 miles north of Anacapa Island, California, killing eighty-eight people. A National Transportation Safety Board (NTSB) investigation attributed the crash to the failure of the horizontal stabilizer trim system jackscrew assembly's acme nuts threads. The nuts threads were worn down due to inadequate lubrication.³³ Maintenance deficiencies including fraudulent documents were among the safety concerns disclosed by Ms. Diefenderfer. Committee Investigators understand Ms. Diefenderfer successfully negotiated a large settlement agreement with the FAA as a result of her complaint before the Merit Systems Protection Board.

Ms. Diefenderfer is not the only FAA whistleblower to face retaliation. In April 2008, FAA Aviation Safety Inspector Charalambe "Bobby" Boutris testified before the House Transportation and Infrastructure Committee revealing there were a number of serious maintenance violations occurring at Southwest Airlines, and that the FAA, in effect, looked the other way.³⁴ He was one of a number of whistleblowers involved in the case. The Inspector General for the Department of Transportation launched an investigation as a result of these disclosures and found multiple examples of whistleblower retaliation. One example involved an FAA Hotline complaint, later attributed to a Southwest Airlines employee, which resulted in a whistleblower being removed from his oversight duties for five months.³⁵ The allegations were unsubstantiated.

The Inspectors General (IG) of federal departments and agencies are independent offices that investigate whistleblower claims of fraud, waste, abuse, and mismanagement. The U.S. Office of Special Counsel (OSC) also receives and investigates federal whistleblower disclosures. The OSC is an independent agency that reviews disclosures, conducts an investigation, and refers their findings to the head of the subject agency, which must then report to the OSC on the findings of an internal investigation and any actions the agency plans to take

³³ National Transportation Safety Board, *Loss of Control and Impact with Pacific Ocean Alaska Airlines Flight 261 McDonnell Douglas MD-83, N963AS About 2.7 Miles North of Anacapa Island, California January 31, 2000*, AAR-02/01 (Washington, DC, 2002), <https://www.nts.gov/investigations/AccidentReports/Reports/AAR0201.pdf>.

³⁴ Scott Bronstein, "Whistle-blower: FAA Boss Threatened Career," *CNN*, April 3, 2008, <http://edition.cnn.com/2008/POLITICS/04/03/airline.safety/index.html>.

³⁵ U.S. Department of Transportation, Office of the Secretary of Transportation, Office of Inspector General, *Review of FAA's Safety Oversight of Airlines and Use of Regulatory Partnership Programs*, AV-2008-057 (Washington, DC, 2008), https://www.oig.dot.gov/sites/default/files/SWA_Report_Issued.pdf.

as a result.³⁶ The OSC will review the report and make a determination as to whether it is reasonable. The OSC then shares the findings with the Executive Office of the President as well as the chairmen and ranking members of the congressional committees with oversight responsibility for the agency involved. Since the beginning of the Committee's investigation, fifty-seven whistleblowers have contacted the Committee. Among those, sixteen have consented to be identified.

D. FAA Aviation Safety and Whistleblower Investigation Office

In 2012, the FAA Modernization and Reform Act included a provision that created an Aviation Safety and Whistleblower Investigation Office within the FAA.³⁷ The FAA had previously implemented an Office of Audit and Evaluation (AAE) and had argued to Congress that the AAE fulfilled the role of the office defined in the legislation. As stated on their website, AAE oversees reports related to aviation safety violations, waste, fraud, abuse and mismanagement, internal FAA rule or policy violations, and whistleblower disclosures.³⁸

The Committee's investigation reveals that many FAA employees, including managers and human resource officials, do not clearly understand what constitutes whistleblowing or how to properly treat employees that make protected disclosures. The Committee interviewed investigators who were responsible for investigating whistleblower retaliation. These investigators were not sure what constituted whistleblowing or which FAA office was responsible for investigating such matters.

In addition to the insufficiency of the AAE, the Committee's investigation revealed serious concerns related to credibility. According to documents reviewed by the Committee, in 2014 one of AAE's own investigators admitted to a colleague that they had been going after whistleblowers and boasted about how many had been fired as a result.³⁹ The person remains employed as a manager in the FAA. This issue became well known among the group of whistleblowers from the 2008 congressional hearings and spread throughout the agency. Numerous whistleblowers describe a general lack of trust in AAE throughout the agency today. Many of the whistleblowers that have appealed to the Committee indicated they came to Congress because they did not trust AAE or the FAA to do the right thing and were fearful of retaliation.

³⁶ U.S. Government Accountability Office, *Whistleblowers: Key Practices for Congress to Consider When Receiving and Referring Information*, GAO-19-432 (Washington, DC, 2019), <https://www.gao.gov/products/GAO-19-432>.

³⁷ *FAA Modernization and Reform Act of 2012*, Public Law 112-95 (2012), <https://www.congress.gov/112/plaws/publ95/PLAW-112publ95.pdf>.

³⁸ U.S. Department of Transportation, Federal Aviation Administration, "Office of Audit and Evaluation," last modified September 15, 2020, https://www.faa.gov/about/office_org/headquarters_offices/aae/.

³⁹ Memorandum for Record, March 14, 2014, April 18, 2014, <https://www.commerce.senate.gov/services/files/621F43CC-9CFE-45AE-BA35-CD5EF9A60FC4>

Finding: The Aviation Safety and Whistleblower Investigation Office enacted as part of the 2012 FAA Modernization and Reform Act was not fully implemented and remains insufficient.

VI. Committee Investigation

A. Correspondence with the FAA

On April 2, 2019, Chairman Wicker sent then Acting FAA Administrator Daniel Elwell a letter requesting information about allegations of inadequate training and certification of FAA Aviation Safety Inspectors (ASI).⁴⁰ At the time, the Committee had received whistleblower disclosures that included allegations that numerous FAA ASIs had not completed required training. The letter included several specific questions and requests, specifying a response by April 16, 2019.

On April 4, 2019, Acting Administrator Elwell responded with an interim letter while the agency gathered the documents requested by the Committee.⁴¹ He noted that the FAA Office of Audit and Evaluation (AAE) had investigated and substantiated an ASI whistleblower disclosure concerning the lack of training of members of the FAA's Aircraft Evaluation Group (AEG), but not those assigned to the Boeing 737 MAX Flight Standardization Board (FSB). Acting Administrator Elwell stated in part:

In November 2018, the FAA's Office of Audit and Evaluation initiated an investigation into concerns raised by one of our Aviation Safety Inspectors, who alleged that safety inspectors within the FAA's Aircraft Evaluation Group did not meet mandatory training requirements. These allegations were specific to the Aircraft Evaluation Group and not about inspectors with the Flight Standardization Board for the Boeing 737 MAX, who have their own, specific training requirements. Further, we can confirm that all of the flight inspectors who participated in the Boeing 737 MAX Flight Standardization Board certification activities were fully qualified for these activities.

On May 2, 2019, sixteen days after the Committee's response deadline, Acting Administrator Elwell sent a letter to the Committee that supplemented his April 4th letter.⁴² In it, he provided additional information regarding the AAE investigation into Gulfstream VII FSB members. The case referenced occurred at the AEG office in Long Beach, California.

⁴⁰ Letter from Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, to Daniel Elwell, Acting Administrator, Federal Aviation Administration, April 2, 2019, <https://www.commerce.senate.gov/services/files/e06e1b59-5df4-497b-8f9c-ce80c02f0426>.

⁴¹ Ibid.

⁴² Letter from Daniel Elwell, Acting Administrator, Federal Aviation Administration, to Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, May 2, 2019, <https://www.commerce.senate.gov/services/files/4588e0e4-976b-4d9d-948d-efe8e6a2cdfc>.

Following the FAA's responses to his initial request, on July 31, 2019, Chairman Wicker sent then-Acting Administrator Elwell a second letter requesting additional information.⁴³ This letter requested un-redacted reports of investigations related to three key whistleblowers, communications that could corroborate a number of whistleblower claims, and documentation to support the FAA's claim that ASIs serving on the Boeing MAX FSB were fully qualified for the tasks that they performed, among other items.⁴⁴

After not receiving any requested documents, on September 5, 2019, Committee staff agreed to prioritize and clarify several specific items in Chairman Wicker's letter to assist the FAA in expediting its response. To date, the Committee has received responses to fewer than half of these prioritized items. Most of the requests contained in Chairman Wicker's July 31, 2019, letter remain outstanding. On August 12, 2019, Steve Dickson was sworn in for a five-year term as the FAA Administrator. Dickson had recently retired as the Senior Vice President of Flight Operations for Delta Airlines.⁴⁵

On October 23, 2019, Chairman Wicker sent a letter to FAA Administrator Dickson expressing his disappointment in the FAA's lack of sufficient and timely responses to his requests for information.⁴⁶ In his letter, the Chairman requested that the FAA make employees available to Committee staff for interviews.

On October 30, 2019, Chairman Wicker sent a letter to FAA Administrator Dickson expressing concern about the "Skyline Aircraft" issue at Southwest Airlines.⁴⁷ The concern included allegations of ineffective oversight of Southwest Airlines by FAA related to inspections and airworthiness certifications for eighty-eight airplanes purchased from foreign carriers. Chairman Wicker requested that Administrator Dickson provide updates on all developments related to the issue.

On December 20, 2019, as a result of the many outstanding requests, Chairman Wicker wrote to FAA Administrator Dickson to request that twenty-one FAA employees be made

⁴³ Letter from Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, to Daniel Elwell, Acting Administrator, Federal Aviation Administration, July 31, 2019, <https://www.commerce.senate.gov/services/files/A22129F6-E00F-4D4D-B22A-65DAF61B2227>.

⁴⁴ Letter from Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, to Daniel Elwell, Acting Administrator, Federal Aviation Administration, July 31, 2019, <https://www.commerce.senate.gov/services/files/A22129F6-E00F-4D4D-B22A-65DAF61B2227>.

⁴⁵ U.S. Department of Transportation, Federal Aviation Administration, "Steve Dickson, Administrator," last modified August 27, 2019, https://www.faa.gov/about/key_officials/dickson/#:~:text=Steve%20Dickson%20was%20sworn%20in,Operations%20for%20Delta%20Air%20Lines.

⁴⁶ Letter from Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, to Stephen Dickson, Administrator, Federal Aviation Administration, October 23, 2019, <https://www.commerce.senate.gov/services/files/A5D5E390-6675-4132-A542-69C798543E86>.

⁴⁷ Letter from Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, to Stephen Dickson, Administrator, Federal Aviation Administration, October 30, 2019, <https://www.commerce.senate.gov/services/files/5EB3BEC9-BCC6-4CCB-A1CD-FE9402C52477>.

available for interviews with Committee staff.⁴⁸ This letter came in response to the DOT's slow response and handling of the interview requests.

On March 11, 2020, after the Committee received whistleblower disclosures of misconduct by the FAA in Hawai'i, Chairman Wicker sent a letter to FAA Administrator Dickson requesting information and documentation related to the whistleblower claims.⁴⁹ That same day, Chairman Wicker sent a second letter to FAA Administrator Dickson urging him to personally ensure that the FAA whistleblower in Hawai'i, Joseph Monfort, was not retaliated against.

FAA Administrator Dickson sent Chairman Wicker a letter on April 14, 2020, in response to both of Chairman Wicker's March 11 letters.⁵⁰ In his letter, Administrator Dickson stated that the FAA was unable to provide documents requested in one of Chairman Wicker's March 11th letters. Administrator Dickson also stated that he was committed to preventing retaliation at the FAA.

By mid-June 2020, the Committee had been permitted to interview four of the twenty-one requested FAA staff over the previous six months. On June 17, 2020, Chairman Wicker presided over a hearing titled, examining the Federal Aviation Administration's Oversight of Aircraft Certification,⁵¹ in which FAA Administrator Dickson provided testimony. Chairman Wicker summarized oversight efforts of the Committee and expressed his dissatisfaction with the responsiveness to his numerous requests for documents and staff interviews. Dickson pledged to expand efforts of the agency to improve the agency's responsiveness.⁵²

Two days after the hearing, the FAA made a fifth witness available. The Committee interviewed the sixth and seventh witnesses in July. Chairman Wicker had requested FAA Administrator Dickson to make twenty-one employees available for interview in his December 20, 2019, letter. In the six months following the request, the FAA made four employees available for interview. Following the June 16, 2020, Committee hearing, the agency made a total of seven additional employees available for interview between June and October. Three of

⁴⁸ Letter not released to the public.

⁴⁹ Letter from Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, to Stephen Dickson, Administrator, Federal Aviation Administration, March 11, 2020, <https://www.commerce.senate.gov/services/files/32347991-3947-4EB7-A097-840E198D48DD>

⁵⁰ Letter from Stephen Dickson, Administrator, Federal Aviation Administration, to Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, April 14, 2020, https://www.faa.gov/about/plans_reports/congress/media/Day-Night-Average-Sound-Levels-COMPLETED-report-w-letters.pdf.

⁵¹ U.S. Congress, Senate, Committee on Commerce, Science, and Transportation, *Examining the Federal Aviation Administration's Oversight of Aircraft Certification: Hearing Before the Committee on Commerce, Science, and Transportation*, 116th Cong., 2d sess., June 17, 2020, webcast at: <https://www.commerce.senate.gov/2020/6/examining-the-federal-aviation-administration-s-oversight-of-aircraft-certification>.

⁵² U.S. Congress, Senate, Committee on Commerce, Science, and Transportation, *Examining the Federal Aviation Administration's Oversight of Aircraft Certification: Hearing Before the Committee on Commerce, Science, and Transportation*, 116th Cong., 2d sess., June 17, 2020 (prepared statement of Stephen M. Dickson, Administrator, Federal Aviation Administration), <https://www.commerce.senate.gov/services/files/2CD68098-DD6D-46FA-BD49-2796F03C1B60>.

the employees requested for interview by Committee investigative staff had separated from the FAA after the Committee had made its request, but were not made available prior to their departure from the agency. In all, the Committee has been allowed to interview less than half of the employees originally requested a year ago. Included among the employees remaining to be interviewed are the most senior officials in Flight Standards who are responsible for the staff and programs for which the majority of the allegations being investigated by the Committee have been made.

Following several of the FAA employee interviews conducted by Committee investigators, investigators requested clarification for several questions posed during interviews. Additionally, documentation was requested to support employee testimony rebutting whistleblower allegations. One example related to an allegation by whistleblowers that an FAA ASI was granted a new type rating on the Gulfstream VII airplane without completing the required ground training. Whistleblowers claimed the FAA employee who was the subject of the interview did not attend any of the required ground school portion of the FSB. During the interview, the employee asserted he/she did in fact attend all of the required training with the whistleblower. Committee staff inquired about the availability of attendance records for the training in question. Interview attendees were not sure if there were such records. Department of Transportation's Office of General Counsel (DOT OGC) assured Committee investigators they would inquire about these records and provide an update. While awaiting follow up from DOT OGC, Committee investigators obtained copies of attendance records for the ground training in question. The records captured several days of training for which the employee in question was not identified on the attendance records. Committee investigative staff notified DOT OGC of this discrepancy, emphasized concern and requested agency official travel records for the employee in question in order to ascertain whether he/she in fact attended the training. Committee staff have not received a response to this request to date. The evidence and statements reviewed by Committee staff suggest the employee did not attend the training as required and may have lacked candor in answering questions during the interview.

In another example, Committee staff learned that audio recordings were made of weekly meetings which allegedly captured unethical conduct related to aircraft certification in an FAA Certificate Management Office (CMO). On August 25, 2020, Committee staff notified DOT OGC about these potential recordings, and requested their preservation and production to the Committee. On August 28, 2020, DOT OGC acknowledged the request and requested additional focus. On August 31, 2020, Committee staff narrowed the recording request to a specific time frame and one specific office. To date the Committee has not received confirmation as to whether these recordings have been located or if/when they will be provided. A whistleblower has confirmed existence of the recordings and advised he/she has made a backup copy of the recordings in question to preserve as evidence.

B. Concerns Surrounding the FAA's Responses

FAA responses to Committee inquiries often conflicted with allegations supported by evidence from whistleblowers, FAA internal communications, and findings of the DOT OIG and the Office of Special Counsel (OSC). Assertions made in letters by then Acting Administrator Elwell were contradicted by internal FAA reports of investigation he included with his response. These inconsistencies and contradictions were further substantiated by an independent OSC investigation. On September 23, 2019, the OSC sent a letter to President Trump outlining its findings related to a whistleblower retaliation case.⁵³

These disclosures were central to Chairman Wicker's April 2, 2019, letter requesting information.⁵⁴ In both of his responses, then-Acting Administrator Elwell stated that all flight inspectors who participated in the Boeing 737 MAX Flight Standardization Board certification activities were fully qualified for those activities. In his first response on April 4, 2019, then-Acting Administrator Elwell confirmed that whistleblower concerns regarding the Gulfstream VII FSB member training had been substantiated, and that one whistleblower had been retaliated against for raising those concerns. In his second response on May 2, 2019, then-Acting Administrator Elwell stated that although the FAA's own independent investigative office, AAE, had substantiated whistleblower claims, the FAA's Flight Standards office had reviewed AAE's findings and concluded that whistleblower claims were due to "confusion," and that the FSB members had, in fact, met all training and certification requirements.⁵⁵

OSC found that of the twenty-two ASIs identified in the whistleblower complaint, sixteen of them had not completed required formal training classes. Of these sixteen ASIs, three of them served on the Boeing 737 MAX FSB. OSC also stated that, based on then-Acting Administrator Elwell's April 4th and May 2nd letters to the Committee,

*FAA's official responses to Congress appear to have been misleading in their portrayal of FAA employee training and competency*⁵⁶

OSC went on to state that:

On April 4, 2019, the FAA provided an interim response to the Committee. In this response, the agency stated that the 'allegations were specific to [AEG] - and not about inspectors with the [FSB] for the Boeing 737 MAX, who have their own specific training

⁵³ Letter from Henry J. Kerner, Special Counsel, U.S. Office of Special Counsel, to Donald J. Trump, President of the United States, September 23, 2019, <https://osc.gov/Documents/Public%20Files/FY19/DI-19-2964/DI-19-2964%20Redacted%20Letter%20to%20the%20President%202.pdf>.

⁵⁴ Letter from Daniel Elwell, Acting Administrator, Federal Aviation Administration, to Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, May 2, 2019, <https://www.commerce.senate.gov/services/files/4588e0e4-976b-4d9d-948d-efe8e6a2cdfc>.

⁵⁵ Ibid.

⁵⁶ Letter from Henry J. Kerner, Special Counsel, U.S. Office of Special Counsel, to Donald J. Trump, President of the United States, September 23, 2019, <https://osc.gov/Documents/Public%20Files/FY19/DI-19-2964/DI-19-2964%20Redacted%20Letter%20to%20the%20President%202.pdf>.

requirements. Further, we can confirm that all of the flight inspectors who participated in the Boeing 737 MAX Flight Standardization Board certification activities were fully qualified for these activities.'

This statement appears inaccurate, however, as both the AAE investigation and the evidence obtained by OSC shows the 737 MAX FSB was staffed by undertrained AEG ASIs. Further, the 737 MAX ASIs do not have their own unique training requirements and were apparently not fully qualified to participate in the FSB certification duties.⁵⁷

The OSC also stated that as part of a related and ongoing investigation it was conducting into possible prohibited personnel practices committed by FAA employees against the whistleblower, it had obtained internal FAA communications and had conducted employee interviews, both of which “adduced credible information directly contradicting the agency’s assertions to the [Commerce] Committee.”⁵⁸ The OSC stated that the information specifically concerns the 737 MAX and “casts serious doubt on the FAA’s public statements regarding the competency of agency inspectors who approved pilot qualifications for this aircraft.”⁵⁹

In its response following the publication of OSC’s letter to the President, the FAA maintained that all ASIs on the Boeing 737 MAX FSB had completed the requisite training for the job functions that they performed. The FAA contested any linkage between improper training and the MAX crashes, but did agree that invalid certifications done by unqualified ASIs on the Gulfstream VII FSB were problematic and raised safety concerns.

According to the AAE’s investigation, an ASI had informed his manager in early July 2018 that two ASIs assigned to the Gulfstream VII FSB had not completed the necessary training to participate in the FSB. AAE’s investigation was completed on February 22, 2019, and concluded that ASIs assigned to both the Long Beach and Seattle AEGs did not meet certain training requirements under FAA policy. AAE also found that management at the Long Beach AEG had retaliated against the ASI who had raised the initial concerns. The Acting Administrator included FAA management’s response to the three recommendations made by AAE.

As part of the FAA response to safety concerns, then-Acting Administrator Elwell stated the Gulfstream VII FSB work at all offices had been stopped pending review of the training histories of the ASIs in question.⁶⁰ This initial investigation was completed by the Aircraft Evaluation Division (AED). They asserted that all ASIs had in fact completed the requisite training for their duties on the FSB. After this finding, the ASI who initially raised his concerns

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ Ibid.

⁶⁰ Letter from Daniel Elwell, Acting Administrator, Federal Aviation Administration, to Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science and Transportation, May 2, 2019, <https://www.commerce.senate.gov/services/files/4588e0e4-976b-4d9d-948d-efe8e6a2cdfc>

elevated them to the DOT OIG, who referred the investigation to both the FAA's Office of Security and Hazardous Materials (ASH), as well as to AAE.

The then-Acting Administrator went on to say that after the AAE report was issued, FAA Flight Standards reviewed the report and evaluated the training requirements in question. According to the Acting Administrator, Flight Standards found that despite AAE's assessment otherwise, the ASIs working on the Long Beach FSB had actually met the training requirements and that the complaint was merely due to "confusion" about the training requirements.⁶¹ Additionally, Flight Standards asserted that On-the-Job Training (OJT) is sufficient for conducting certification or type rating work. Acting Administrator Elwell confirmed that the manager responsible for retaliating against the whistleblower was no longer employed by the FAA. In his July 2019 letter, Chairman Wicker asked that Committee staff be allowed to interview the employee, but the employee separated from the FAA before the interview could take place.

The AAE report attached to Acting Administrator Elwell's letter, however, paints a starkly different picture of the training deficiencies found in both the Seattle and Long Beach AEG offices. As mentioned, AAE's investigation found that the ASIs in question did not meet training requirements under FAA policy. AAE also found that OJT for ASIs assigned to an AEG is not sufficient training to certify ASIs to issue type ratings. AAE stated that:

These findings are very serious and could have far-ranging ramifications regarding the type ratings of hundreds of certificate holders. Because it involves AEG ASI's, the proverbial "tip of the pyramid" for pilot qualification and certification, every type rating issued by an unqualified ASI potentially creates another potentially unqualified pilot, including other ASIs, and the most senior pilots and check pilots at FAA-certificated operators.

The AAE report included three recommendations. First, the FAA should cease all type rating work by ASIs found to not meet training requirements. In his April 22 management response, Acting Administrator Elwell stated that the division manager had immediately stopped all FSB activity. However, this is inconsistent with information obtained from the whistleblower who raised the initial concerns. According to several whistleblowers, work on the Gulfstream VII FSB never ceased. Chairman Wicker's July 31, 2019, letter requested documentation supporting this work stoppage, and this request remains outstanding as of the date of this report.⁶² FAA staff interviews revealed inconsistencies on how or if this directive was communicated. One manager stated that he directed the work stoppage and it was his idea.

⁶¹ Letter from Daniel Elwell, Acting Administrator, Federal Aviation Administration, to Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science and Transportation, May 2, 2019, <https://www.commerce.senate.gov/services/files/4588e0e4-976b-4d9d-948d-efe8e6a2cdfc>.

⁶² Letter from Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, to Daniel Elwell, Acting Administrator, Federal Aviation Administration, July 31, 2019, <https://www.commerce.senate.gov/services/files/A22129F6-E00F-4D4D-B22A-65DAF61B2227>.

Another manager was sure it was “written in an email or a memo.”⁶³ To date, no confirmation of any work stoppage has been provided to the Committee.

The second recommendation was for Flight Standards to remove any derogatory information from the whistleblower’s personnel files related to their whistleblowing. Acting Administrator Elwell stated in his second response letter that this had been completed. The whistleblower has since settled his complaint with the agency.

AAE’s third recommendation was that the Executive Director of Flight Standards, Rick Domingo, provide a written apology to the whistleblower for the retaliation. Acting Administrator Elwell stated that Flight Standards agreed with this recommendation but that the letter of apology was still being drafted. This apology letter was eventually sent on July 19, 2019, after Committee staff engaged DOT OGC on the outstanding matter. In the response letter, Rick Domingo erroneously refers to the Seattle AEG as the “Aircraft Employment Group,” instead of the Aircraft Evaluation Group.⁶⁴ While agency officials assert this mischaracterization as a typo, several whistleblowers contend it is not and illustrates just how out of touch with the organization the Director of Flight Standards is. The Director of Flight Standards is among the employees requested by Chairman Wicker to be interviewed but was not made available over the last year.

In a subsequent investigation involving the FAA’s correspondence summarized above, the OSC found that, “FAA’s Official responses to Congress appear to have been misleading in their portrayal of FAA employee training and competency”. The Committee concludes the representations by the FAA were, in fact, misleading at the very least. Whistleblowers contend actions by FAA senior officials were designed to cover up their incompetence.

FAA Conduct of Investigations

Reports of Investigation (ROI) and related documents reviewed by Committee staff suggest the FAA is not currently utilizing best investigative practices uniformly across the agency. Policy is unknown, varies, or is not followed effectively in various offices and lines of business. Witness interviews confirmed lack of standardization in the conduct of investigative interviews including number of investigators present, the construction of a witness list, drafting of questions, whether the interview is recorded, and the creation and integrity of a case file. One investigator admitted using his/her FAA issued iPhone as a recording device for an interview and inadvertently deleting the recording. The investigator further indicated there was no policy on recording interviews. One whistleblower who had been interviewed by this investigator told the Committee the investigator was unprofessional and hostile toward him/her and the recording of the interview in question would have proved it.

⁶³ Senate Commerce Committee Staff has these notes from the call with the managers.

⁶⁴ Letter from Rick Domingo, Executive Director, Flight Standards Service, United States Department of Transportation, Federal Aviation Administration, July 19, 2019, <https://www.commerce.senate.gov/services/files/110997AE-AC0D-4558-8D34-15E2D3ABAD55>

In another case, whistleblowers allege the FAA did not sufficiently investigate a complaint that an employee left a simulator training early while remaining on the clock. The investigator assigned to the investigation confirmed he/she did not substantiate the allegation beyond establishing that the employee left the simulator early. The investigator did not determine where the employee had been when he/she was supposed to be observing the simulator training event despite allegations of outside employment. Committee staff asked if the investigator made cursory investigative queries regarding the absence, including electronic physical security or computer access logs, surveillance cameras, or government cell phone location for the time in question. The investigator confirmed that he/she had not taken any of those steps and had no explanation as to why he/she had not. This allegation was simply not fully investigated.

The FAA's investigative reports also raise credibility concerns. When asked about the drafting of reports of investigations or interview summaries, an FAA investigator indicated it is common for the investigator to assist a witness or interviewee in writing a statement following an interview. In some cases, the investigator stated they often write the statement for the witness or interviewee to sign.

Committee investigators reviewed several instances of staff from FAA lines of business being detailed to conduct investigations. AAE, the office which was intended to conduct independent whistleblower investigations, often utilizes inspectors from the field to conduct investigations. FAA officials cited lack of resources as the reason AAE often relies on staff in the field to conduct their investigations.

C. Other Investigations

Office of Special Counsel

On September 23, 2019, the OSC sent a letter to the President outlining their findings related to a whistleblower case.⁶⁵ The same whistleblower had made numerous protected disclosures to the Committee since March 2019. The Whistleblower claimed that ASIs on the FSB for the Gulfstream VII aircraft lacked required training, that eleven out of seventeen Operations ASIs in the Seattle AEG lacked required training, and that these unqualified inspectors had administered hundreds of invalid certifications that qualified pilots to operate aircraft. The OSC found that of the twenty-two ASIs identified in the complaint, sixteen of them had not completed formal training classes. Of these sixteen ASIs, three of them served on the Boeing 737 MAX FSB. The OSC also stated that, based on the FAA's April 4th and May 2nd, 2019, letters to the Committee, "FAA's official responses to Congress appear to have been misleading in their portrayal of FAA employee training and competency."

⁶⁵ Letter from Henry J. Kerner, Special Counsel, U.S. Office of Special Counsel, to Donald J. Trump, President of the United States, September 23, 2019, <https://osc.gov/Documents/Public%20Files/FY19/DI-19-2964/DI-19-2964%20Redacted%20Letter%20to%20the%20President%202.pdf>.

In their response following the publication of OSC's letter to the President, the FAA maintained that all ASIs on the MAX FSB had completed the requisite training for the job functions that they performed. The FAA contested any linkage to the MAX crashes, but did allow that invalid certifications done by unqualified ASIs were problematic and raised safety concerns.

Several whistleblowers, both anonymous and identified in this report, have filed complaints with the OSC. In many instances, Committee staff have informed and referred these individuals to the OSC. The Committee will remain engaged as appropriate with OSC on these pending complaints.

National Transportation Safety Board Investigations

On September 26, 2019, the NTSB issued seven safety recommendations that resulted from the NTSB's participation in the Lion Air and Ethiopian Airlines crash investigations. In its report, the NTSB raised concerns with the assumptions that Boeing used when designing the Maneuvering Characteristics Augmentation System (MCAS). Specifically, while Boeing based its design assumptions on FAA guidance, the NTSB concluded that Boeing did not "adequately consider and account for the impact that multiple flight deck alerts and indications could have on pilots' responses to the hazard."⁶⁶

Essentially, when Boeing ran the flight test in which they tested the MCAS, they did not have any other alarms or alerts going off that could have theoretically been going off in a situation that led to an MCAS activation. In both the Lion Air and Ethiopian Airlines accidents, the preliminary reports show that multiple alerts were going off in the cockpit.⁶⁷ The NTSB stated that these "multiple alerts and indications can increase pilots' workload, and the combination of the alerts and indications did not trigger the accident pilots to immediately perform" the action Boeing assumed they would take.⁶⁸ The NTSB recommended that the FAA develop tools and methods to validate the assumptions on pilot recognition and response as part of the design certification process.

Furthermore, the NTSB recommended that since the FAA works to harmonize these processes with other international civil aviation authorities, the FAA should encourage these authorities to evaluate any changes that may be necessary. The NTSB also raised concerns that in situations where pilots encounter multiple alerts, which could potentially require multiple crew actions, it would be beneficial to provide pilots with a way to understand which actions they should take first.⁶⁹ The NTSB recommended the FAA develop design standards for

⁶⁶ National Transportation Safety Board, *Safety Recommendation Report: Assumptions Used in the Safety Assessment Process and the Effects of Multiple Alerts and Indications on Pilot Performance*, ASR-19-01 (Washington, DC, 2019), <https://www.nts.gov/investigations/AccidentReports/Reports/ASR1901.pdf>.

⁶⁷ Ibid.

⁶⁸ Ibid., 7.

⁶⁹ Ibid., 8.

“aircraft system diagnostic tools that improve the prioritization and clarity of failure indications” to assist pilots in their responses.⁷⁰ Several incidents detailed in this Committee investigative report remain under investigation by the NTSB.

Joint Authorities Technical Review

On June 1, 2019, the FAA convened the Joint Authorities Technical Review (JATR) to review the certification of the flight control system on the Boeing 737 MAX.⁷¹ On October 11, 2019, the JATR published its findings and twelve main recommendations.⁷² The report criticized the FAA for relying on outdated certification procedures, having insufficient technical staff, and failing to incorporate realistic “human factors” into its assessments. The report also faulted Boeing for failing to adequately update the FAA on changes to the MCAS design, and having internal procedures that made it difficult for Boeing engineers to communicate directly with FAA engineers.⁷³

The JATR recommended that the FAA update its regulations, guidance, and certification procedures to account for more complex, automated, and interdependent aircraft designs. As changes to the MCAS system were made in design, the JATR recommended the FAA ensure more involvement in early-stage design assumptions, especially for proposed design changes. Variant aircraft (such as the Boeing 737 MAX) are based on an aircraft whose type certification is roughly 40-years-old; however, technology has been added to the aircraft through different variations of the original type certification. Therefore, the JATR recommended that certification must account for the cumulative impacts of new systems and modifications on the entire aircraft “system” (including subsystems, flight crews, and maintenance crews).⁷⁴ The JATR recommended that the FAA ensure the FAA office overseeing Boeing’s certification activities is adequately staffed and has the right staff experience level. Because the FAA and Boeing have certain design assumptions based on how a crew will respond in certain events, which may not currently be valid, the JATR recommended that the FAA put more resources into “human factors” analysis for certification.⁷⁵

⁷⁰ National Transportation Safety Board, “Accident Report Detail: Safety Recommendation Report: Assumptions Used in the Safety Assessment Process and the Effects of Multiple Alerts and Indications on Pilot Performance,” <https://ntsb.gov/investigations/AccidentReports/Pages/ASR1901.aspx>.

⁷¹ David Shepardson and Jamie Freed, “FAA Failed to Properly Review 737 MAX Jet’s Anti-stall System: JATR Findings,” *Reuters*, October 11, 2019, <https://www.cnbc.com/2019/10/11/faa-failed-to-properly-review-737-max-jet-anti-stall-system-jatr-findings.html>.

⁷² Joint Authorities Technical Review, *Boeing 737 MAX Flight Control System: Observations, Findings, and Recommendations* (Washington, DC, 2019), https://www.faa.gov/news/media/attachments/Final_JATR_Submittal_to_FAA_Oct_2019.pdf.

⁷³ *Ibid.*

⁷⁴ *Ibid.*

⁷⁵ *Ibid.*

Department of Transportation Office of Inspector General

Southwest Airlines Audit

On June 20, 2018, DOT OIG initiated an audit of FAA's safety oversight of Southwest Airlines.⁷⁶ DOT OIG specified that the main objective of this audit was to assess the FAA's oversight of Southwest Airline's risk management systems. The audit was opened as a result of "recent events (that) have raised concerns about FAA's safety oversight, particularly for Southwest Airlines."⁷⁷ DOT OIG stated in its audit announcement that it had received a complaint regarding a number of operational issues at Southwest Airlines, including pilot training deficiencies. On October 29, 2019, DOT OIG held a briefing for the Committee staff to share a number of preliminary findings and concerns, including abuse of Aviation Safety Action Program (ASAP), performance weight and balance noncompliance, and the "Skyline Aircraft" issues.

On February 11, 2020, the DOT OIG released its audit of the FAA's oversight of Southwest Airlines.⁷⁸ Among other issues, the audit found that Southwest had put "17.2 million passengers at risk" with the Skyline Aircraft program by operating aircraft in unknown airworthiness conditions, confirming allegations made to the Committee by Inspector Boutris and other whistleblowers.⁷⁹ The audit also found that Southwest "regularly and frequently communicated incorrect aircraft weight and balance data to its pilots." DOT OIG stated that the FAA "cannot provide assurance that the carrier (Southwest) operates at the highest degree of safety in the public's interest, as required by law."⁸⁰ The FAA concurred with all eleven of DOT OIG's recommendations to improve FAA's oversight of Southwest Airlines.

Boeing 737 MAX Investigation

The Committee remains engaged with DOT OIG on its audit and investigations related to aviation safety, including the 737 MAX. On June 29, 2020, the DOT OIG released an initial report regarding the 737 MAX.⁸¹ This is the first installment of their reporting and is largely a

⁷⁶ Memorandum from Matthew E. Hampton, Assistant Inspector General for Aviation Audits, Office of Inspector General, U.S. Department of Transportation, to the Director of Audit and Evaluation, U.S. Department of Transportation, June 20, 2018, <https://www.oig.dot.gov/sites/default/files/Audit%20Announcement%20-%20FAA%20Oversight%20of%20Southwest%20Airlines.pdf>.

⁷⁷ Ibid.

⁷⁸ U.S. Department of Transportation, Office of Inspector General, *FAA Has Not Effectively Overseen Southwest Airlines' Systems for Managing Safety Risk*, AV2020019 (Washington, DC, 2020), <https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Southwest%20Airlines%20Final%20Report%5E02.11.2020.pdf>.

⁷⁹ Ibid., 14.

⁸⁰ Ibid., 14.

⁸¹ U.S. Department of Transportation, Office of Inspector General, *Timeline of Activities Leading to the Certification of the Boeing 737 MAX 8 Aircraft and Actions Taken After the October 2018 Lion Air Accident*, AV2020037 (Washington, DC, 2020),

chronology of the events surrounding the crashes. Due to the ongoing criminal investigation, scarce details beyond what has been revealed in the related audits and other reports are available to the Committee. The Committee is hopeful that this complex review and criminal investigation will answer many questions and provide accountability as necessary.

Pending DOT OIG Recommendations

Of particular concern is the number of outstanding DOT-OIG recommendations issued over the past several years that have not been adopted or resolved by the FAA. Many of these recommendations are particularly relevant to deficiencies and safety concerns revealed in the Committee investigation. Listed below are unresolved high-impact FAA safety-related audit recommendations, according to the DOT OIG.

- FAA Lacks an Effective Staffing Model and Risk-Based Oversight Process for Organization Designation Authorization⁸²—issued October 2015.
- Develop and implement system-based evaluation criteria and risk-based tools to aid ODA team members in targeting their oversight⁸³—issued October 2015.
- FAA Has Not Effectively Overseen Southwest Airline’s Systems for Managing Safety Risks⁸⁴—issued February 2020.
- Develop and implement a management control process to ensure air carriers and inspectors do not use Safety Management Systems as a substitute for regulatory compliance.⁸⁵
- Develop and implement guidance on how to evaluate air carrier safety risk assessments to ensure the carrier has performed a comprehensive analysis, identified root causes, and established appropriate corrective actions.⁸⁶
- FAA Needs to Improve Its Oversight to Address Maintenance Issues Impacting Safety at Allegiant Air⁸⁷—issued December 2019.
- Revise its Compliance and Enforcement guidance and its Inspector guidance to include the severity of outcomes as a factor in considering whether inspectors should initiate compliance or enforcement actions.⁸⁸

<https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Boeing%20737%20MAX%20Certification%20Timeline%20Final%20Report.pdf>.

⁸² U.S. Department of Transportation, Office of Inspector General, *FAA Lacks an Effective Staffing Model and Risk-Based Oversight Process For Organization Designation Authorization*, AV-2016-001 (Washington, DC, 2015), <https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20ODA%20Final%20Report%5E10-15-15.pdf.pdf>.

⁸³ Ibid.

⁸⁴ U.S. Department of Transportation, Office of Inspector General, *FAA Has Not Effectively Overseen Southwest Airlines’ Systems for Managing Safety Risks*, AV2020019 (Washington, DC, 2020), <https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Southwest%20Airlines%20Final%20Report%5E02.11.2020.pdf>.

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ U.S. Department of Transportation, Office of Inspector General, *FAA Needs to Improve Its Oversight to Address Maintenance Issues Impacting Safety at Allegiant Air*, AV2020013 (Washington, DC, 2019), <https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Allegiant%20Air%20Final%20Report.pdf>.

⁸⁸ Ibid.

- Perform a comprehensive review of FAA’s root cause analysis training to ensure it meets agency expectations. Modify training, as appropriate, based on the review and require inspectors to complete the course(s) or offer inspectors access to industry-based training programs.⁸⁹

Committee Investigative Referrals

On January 31, 2020, the Committee released a fact sheet detailing whistleblower allegations of misconduct at the FAA FSDO in Honolulu, Hawai’i.⁹⁰ As part of its investigation, the Committee referred information to the DOT OIG for investigation. The Committee recently received additional information related to the airworthiness of the airplane involved in the skydiving flight fatal accident that killed 11 in Hawai’i in June 2019. This information has been shared to supplement the previous referral. The DOT OIG’s investigation is ongoing. Committee staff will continue to make such referrals as additional information is received and developed.

Finding: Acting-Administrator Elwell’s response to Chairman Wicker’s letter was misleading.

Finding: Committee interviews of FAA employees revealed conflicting statements about a claimed Flight Standardization Board (FSB) work stoppage, and no one could confirm whether the work stoppage asserted by Acting-Administrator Elwell actually took place.

Finding: An FAA Aviation Safety Inspector (ASI) may have lacked candor when asserting they completed all FSB ground training prior to receiving a check ride and subsequent type rating for the Gulfstream VII.

⁸⁹ Ibid.

⁹⁰ U.S. Senate Committee on Commerce, Science, and Transportation, “Fact Sheets: Whistleblower Allegations of Misconduct at the FAA Flight Standards District Office in Honolulu, Hawai’i,” January 31, 2020, <https://www.commerce.senate.gov/2020/1/whistleblower-allegations-of-misconduct-at-the-faa-flight-standards-district-office-in-honolulu-hawai-i>.

VII. Whistleblower Disclosures

The Committee's numerous interviews indicate the FAA fosters a culture that has a dismissive attitude toward whistleblowers, which often leads to retaliation. At least one investigator tasked with investigating misconduct and whistleblower retaliation was not sure what constituted a protected disclosure for whistleblowing. That investigator agreed that if he/she did not understand what constituted whistleblowing, it would be impossible for him/her to identify it in the course of an investigation, much less refer it to the appropriate office for action. Other interviews revealed that there is significant internal confusion in the FAA as to who is responsible for investigating whistleblower retaliation and misconduct.

In one instance of hostility toward whistleblowers, FAA managers initiated what appeared to be a retaliatory management inquiry against a whistleblower and received support from front line and supervisory human resource personnel until a senior official intervened and stopped the action. In this example, several lines of business and multiple levels of management believed the whistleblower was not permitted to "go outside" the FAA with a safety disclosure to the Department of Transportation's Office of Inspector General (DOT OIG), and many officials supported investigating them.

Several of the Committee's whistleblowers agreed to have their names disclosed during FAA staff interviews to further discussion of specific allegations. Some senior managers interviewed were openly dismissive when the Committee mentioned specific whistleblowers. One manager characterized a whistleblower's disclosures as "rants," and another dismissed a whistleblower's concern by claiming the whistleblower is difficult to work with in the FAA. When confronted with details of specific events, several managers revealed their lack of understanding of the policies and guidance governing their responsibilities. The Committee's extensive review of detailed records and communications from whistleblowers supported a high degree of credibility to their allegations. The interviews of FAA senior managers provided further credibility to many whistleblower assertions while raising questions about the managers' own qualifications and understanding of a manager's roles.

The Committee investigation found a persistent culture of whistleblower retaliation in the FAA. This finding is well supported by several Office of Inspector General (OIG), Office of Special Counsel (OSC), Office of Audit and Evaluation (AAE), and media reports, in addition to several court cases/law suits and numerous congressional oversight hearings.

A. Boeing and 737 MAX

On October 29, 2018, a B737-8 MAX operating as Lion Air flight 610 crashed shortly after takeoff in Jakarta, Indonesia. On November 5, 2018, evidence emerged of a potential contributor to the accident. The FAA conducted a preliminary risk assessment using a safety process established in FAA order 8110.107A, Monitor Safety/Analyze Data (MSAD). Based on the FAA's finding in the risk assessment, the FAA determined urgent mandatory action was

needed. The FAA then issued Emergency AD, requiring flight crews to use a revised runway stabilizer operational procedure if they encountered certain conditions.⁹¹

On March 10, 2019, Ethiopian Airlines flight 302, also a Boeing 737 MAX airplane, crashed shortly after takeoff in Addis Ababa, Ethiopia. Physical evidence from the crash site indicated that the aircraft was in a configuration that would have an armed Maneuvering Characteristics Augmentation System (MCAS).⁹² After finding a potential relationship between the two crashes, the FAA issued an Emergency Order of Prohibition grounding all 737 MAX aircraft.

Over the past twenty months, Committee staff have received disclosures from multiple whistleblowers alleging coziness between the FAA and Boeing, and lack of diligent oversight by the FAA in general, specifically in the certification of the 737 MAX. Multiple whistleblowers alleged Boeing intentionally misled FAA certification efforts and downplayed the significance of MCAS. In May 2019, whistleblowers identified Boeing Chief Technical Pilot Mark Forkner to Committee investigative staff as a person who had intentionally misled the FAA to expedite 737 MAX certification to the benefit of Boeing. In his July 31, 2019, letter to Acting FAA Administrator Daniel Elwell,⁹³ Chairman Wicker requested “all communications between Mark Forkner and FAA employees.”

On September 5, 2019, after a series of limited productions in response to the Chairman’s July 31, 2019, letter, Committee staff held a call with Department of Transportation’s Office of General Counsel (DOT OGC) to discuss the slow pace of document production and ways in which certain requests could be prioritized. As a result of that call, Committee staff sent an email on September 5, 2019, prioritizing a much narrower range of the request. Among these prioritizations were “all communications between Mark Forkner and FAA employees.”

On October 7, 2019, four weeks after Committee staff sent a list of prioritized items, the FAA produced a limited set of emails between Mark Forkner and FAA employees. The emails were routine correspondence from 2014 to 2018. None were of particular interest. In its production to the Committee, DOT OGC stated, “this production is responsive to G1,” referring to the request for “all communications between Mark Forkner and FAA employees.” Committee staff responded by asking if the production constituted a complete response to G1, and never received a response.

Just over a week later, on October 18, 2019, numerous media outlets reported on salacious emails and text messages by Boeing employees about their efforts on the 737 MAX

⁹¹ U.S. Department of Transportation, Federal Aviation Administration, *Preliminary Summary of the FAA’s Review of the Boeing 737 MAX*, version 1 (Washington, DC, 2020), <https://www.faa.gov/news/media/attachments/737-MAX-RTS-Preliminary-Summary-v-1.pdf>.

⁹² Ibid.

⁹³ Letter from Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, to Daniel Elwell, Acting Administrator, Federal Aviation Administration, July 31, 2019, <https://www.commerce.senate.gov/services/files/A22129F6-E00F-4D4D-B22A-65DAF61B2227>.

certifications.⁹⁴ Later the same day, FAA legislative affairs staff contacted the Senate Commerce, Senate Appropriations, House Appropriations, and House Transportation and Infrastructure Committees to pass along instant messages between Mark Forkner and another Boeing employee that Boeing had provided to DOT. These instant messages were the subject of the media reporting and had been exchanged during November 2016. In the messages, Mark Forkner expressed concern that the MCAS system is “running rampant” and that the plane is “trimming itself like crazy” during simulated test flights. Forkner stated that he “basically lied to the regulators (unknowingly).” Included in the transmittal of these instant messages was a letter from Administrator Dickson to Boeing CEO Dennis Muilenburg. In his letter, Administrator Dickson asked for an immediate explanation of the instant messages and why they were only transmitted to DOT the day before, when Boeing had discovered the messages “months ago.”⁹⁵

Five hours after transmitting the instant messages that it had received from Boeing, the FAA sent a second disclosure to the four committees that contained emails between Mark Forkner and FAA employees. The FAA chose to redact personal information of FAA employees.

Emails of particular note are summarized below:⁹⁶

- On October 5, 2015, Forkner tells an FAA employee that he is on his way to “jedi mind trick these people into buying some airplanes.”
- On March 30, 2016, Forkner emails an FAA employee requesting that all reference to MCAS be removed from the Flight Crew Operations Manual and training, “as it is completely transparent to the flight crew and only operates WAY outside of the normal operating envelope[.]”
- On November 3, 2016, Forkner emails an FAA employee stating that he is “doing a bunch of travelling through the next few months; simulator validations, jedi mind tricking regulators into accepting the training that I got accepted by the FAA etc.”
- On January 17, 2017, Mark Forkner reminds an FAA employee that they had agreed to delete MCAS from the “draft FSB” because it is “way outside the normal operating envelope.”
- On February 9, 2018, Forkner emails an FAA employee stating that he supports removing differences table from the 737 MAX FSB report if the FSB can “jedi mind trick 280 into doing what they let Brand A get away with (i.e. not publishing them)[.]”

⁹⁴ David Gelles and Natalie Kitroeff, “Boeing Pilot Complained of ‘Egregious’ Issue With 737 Max in 2016,” *The New York Times*, October 18, 2019, <https://www.nytimes.com/2019/10/18/business/boeing-flight-simulator-text-message.html>.

⁹⁵ Letter from Steve Dickson, Administrator, Federal Aviation Administration, U.S. Department of Transportation, to Dennis Muilenburg, President and Chief Executive Officer, The Boeing Company, October 18, 2019, https://www.faa.gov/news/media/attachments/Boeing_letter.pdf.

⁹⁶ Emails from Mark Forkner, Boeing, October 5, 2015, March 30, 2016, November 3, 2016, November 9, 2016, January 17, 2017, February 9, 2018, <https://www.commerce.senate.gov/services/files/40B117EA-4C4F-496B-91F0-D7A4816DF71E>

These emails show Mark Forkner attempting to get the MCAS system removed from all pilot training as well as the Flight Crew Operations Manual (FCOM) well after he had discovered that the MCAS system was not behaving correctly.

Later on October 18, 2019, the DOT OGC produced additional documents responsive to the Committee's request of "all communications between Mark Forkner and FAA employees." This production did not include any of the disturbing emails sent hours earlier by the FAA legislative affairs office to four Congressional committees. It included some duplicates from the October 7, 2019, production and contained mostly routine scheduling emails.

In summary:

- On July 31, 2019, the Committee requested Mark Forkner's communications with FAA employees.
- On September 5, 2019, the Committee prioritized Mark Forkner's communications with FAA employees.
- On October 7, 2019, the FAA sent a limited number of unimportant emails between Mark Forkner and FAA employees.
- On October 18, 2019:
 - FAA transmitted instant messages from Mark Forkner to another Boeing employee that detail Forkner's concerns in 2016 about the MCAS system and his misleading statements to regulators.
 - FAA transmitted emails from Mark Forkner to FAA employees in which Forkner asks that MCAS be removed from training and manuals and states that he is, "Jedi mind tricking regulators."
 - FAA responded to the Committee's request for "all communications between Mark Forkner and FAA employees" with a set of unimportant emails that did not contain disturbing ones sent earlier in the day.

The content and tone of communications by Boeing employees during the certification of the 737 MAX are disturbing. It remains unknown if the Committee has received all documents related to Forkner, as requested. In addition, the documents received from FAA are redacted, obscuring critical information. Unredacted versions were never provided despite having been requested. The failure of DOT OGC to produce documents previously requested by the Committee only to view them in media reporting and finally from FAA legislative affairs, suggests DOT OGC intentionally withheld relevant information requested by the Committee.

MCAS Training and Human Factors

Documents provided by whistleblowers have confirmed the existence of MCAS references in early Boeing documentation for FCOM that were later removed. Whistleblowers provided documentation supporting this allegation.⁹⁷ Additional investigation by the Committee of many of the 737 MAX allegations were and remain constrained due to the continued criminal investigation into the matter. As a result, the Committee focused investigative efforts on allegations that would likely not conflict with ongoing criminal investigations.

Multiple independent whistleblowers contacted the Committee to allege FAA senior management was complicit in determining the 737 MAX training certification level prior to any evaluation. One whistleblower asserted that they were informed of a phone call by a fellow employee with a senior Flight Standards official in which the official directed the result of the 737 MAX training to be no greater than Level B prior to any testing being conducted. According to the FAA, Level B training is applicable to related aircraft with system or procedure differences that can be addressed through aided instruction.⁹⁸ In short, Level B training does not require testing in a simulator, but can be completed by reviewing documents and computer aided instruction. When contacted by Committee investigators, the FAA employee reported to have had the phone call claimed to not recall the specifics about the call with the Flight Standards senior manager. An email obtained by Committee investigators memorializes the phone call described above and concerns about motivations related to 737 MAX training level requirements.⁹⁹ Review of documents received to date and subsequent staff interviews have been unable to substantiate this allegation. However, as stated above, the Committee has yet to receive all documents related to Mr. Forkner's communications with the FAA requested by the Committee over a year ago. Additionally, the OSC and DOT OIG investigators were notified about this phone call and related allegation by the whistleblower in an email on June 7, 2019.¹⁰⁰

A considerable focus of the investigation following the tragic crashes of Lion Air Flight 610 on October 29, 2018, and Ethiopian Airlines Flight 302 on March 10, 2019, was stabilizer trim system and the addition of the MCAS. The stabilizer trim refers to the position and adjustment of the horizontal stabilizer located on the rear of an airplane. The horizontal stabilizer is the primary control of pitch for the aircraft, resulting in a nose up, nose down, or trimmed position which is level flight.

⁹⁷ *Maneuver Characteristics Augmentation System*, Picture,

<https://www.commerce.senate.gov/services/files/C97801F5-6664-43E3-B06A-B84529018E70>

⁹⁸ U.S. Department of Transportation, Federal Aviation Administration, *Guidance for Conducting and Use of Flight Standardization Board Evaluations*, advisory circular 120-53B (Washington, DC, 2013), https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_120-53B.pdf.

⁹⁹ *American Airlines Pilots Request Sim Trn prior to MAX return*, June 7, 2019,

<https://www.commerce.senate.gov/services/files/3C9CFBF6-CD8F-4669-BFB1-286E4F084ADA>

¹⁰⁰ Ibid.

According to Boeing, “MCAS flight control law was designed and certified for the 737 MAX to enhance the pitch stability of the airplane – so that it feels and flies like other 737s.”¹⁰¹ According to ASR1901 National Transportation Safety Board (NTSB) Report, multiple activations of MCAS and the crew’s inability to recognize and effectively counter the activations resulted in the two tragic crashes.¹⁰² There continues to be debate regarding the various factors and the extent to which each contributed to the crashes, including lack of knowledge of MCAS, sufficiency of pilot training, and level of pilot experience. Factors related to pilot actions are known as Human Factors. The FAA has a Human Factors Division focused on Human Factors issues. According to the FAA:

*Human factors specialists in the FAA's Aviation Safety (AVS) organization promote safety in the National Airspace by working to reduce the occurrence and impact of human error in aviation systems and improve human performance. These specialists have expertise in the design and/or evaluation of aircraft systems, maintenance, operations, procedures, pilot performance, associated FAA policy, and guidance. They develop regulations, guidance, and procedures that support the certification, production approval, and continued airworthiness of aircraft; and certification of pilots, mechanics, and others in safety-related positions.*¹⁰³

On May 2, 2019, Boeing representatives provided a briefing to Committee majority staff in which they presented a clear opinion that the crashes were largely due to pilot inexperience. The representatives minimized the significance of MCAS and stated the crashes would likely never have happened with U.S. - trained pilots. Boeing representatives largely attributed the two MAX crashes to human factors. An example of a human factor is the pilot response time to identify and correct a runaway stabilizer problem. Boeing assumes a reaction time of four seconds for a pilot to identify and begin correcting a runaway stabilizer problem. The 737 MAX Flight Control System Joint Authorities Technical Review (JATR) published in October 2019 includes a review of this assumption as one of its recommendations.¹⁰⁴ Boeing considers this maneuver a memory item and assumes a pilot can recognize and act upon the situation from memory alone in four seconds.

¹⁰¹ Boeing, “737 MAX Software Update,” <https://www.boeing.com/commercial/737max/737-max-software-updates.page#:~:text=The%20Maneuvering%20Characteristics%20Augmentation%20System,and%20flies%20like%20other%20737s>.

¹⁰² National Transportation Safety Board, *Safety Recommendation Report: Assumptions Used in the Safety Assessment Process and the Effects of Multiple Alerts and Indications on Pilot Performance*, ASR-19-01 (Washington, DC, 2019), <https://www.commerce.senate.gov/services/files/D5F47FAD-8DC6-479D-A53E-B727E80603BC>

¹⁰³ U.S. Department of Transportation, Federal Aviation Administration, “Human Factors in Aviation Safety (AVS),” last modified August 10, 2020, https://www.faa.gov/aircraft/air_cert/design_approvals/human_factors/.

¹⁰⁴ Joint Authorities Technical Review, *Boeing 737 MAX Flight Control System: Observations, Findings, and Recommendations* (Washington, DC, 2019), https://www.faa.gov/news/media/attachments/Final_JATR_Submittal_to_FAA_Oct_2019.pdf.

737 MAX Recertification Testing

According to a whistleblower who served as an FAA Aviation Safety Inspector in an FAA Certificate Management Office, the long-assumed reaction time described above is not realistic. The whistleblower shared results of simulator tests in which he/she presented “runaway stab trim” to several randomly selected flight crews during simulator training for the Boeing 737-NG. In this runaway stabilizer event, a trim motor malfunction caused the airplane to deviate from level flight, resulting in an excessive nose pitch up or down position. Pilots are trained to execute a procedure for stabilizer runaway.¹⁰⁵ The procedure is documented in a Quick Reaction Checklist and not from memory for many U.S. commercial carriers. The simulator in the ad-hoc testing conducted by the whistleblower did not incorporate MCAS and, therefore, may have been perceived as less demanding than an MCAS-induced event.

The three flight crews presented with this scenario responded with reaction times to identify the problem in seven, nine, and eleven seconds. The time to complete the corrective action and correct the situation was forty-nine, fifty-three, and sixty-two seconds. In each instance, the simulator ended up in a nose pitch down altitude but the simulated aircraft was able to be recovered. The whistleblower emphasized these tests were completed in a 737-NG simulator and MCAS was not an available feature or factor in the test scenarios. The whistleblower contends that the result of these tests indicate Boeing’s assumed reaction time of seconds is unrealistic. The scenario is exacerbated by inadequate training of flight crews. The whistleblower shared these results and related concerns in an email to the Seattle AEG on August 7, 2019.¹⁰⁶

The whistleblower’s ad hoc testing was encouraged by the Aircraft Evaluation Group (AEG) officials, due to previous testing related to pilot reaction times to an MCAS induced runaway stabilizer in July 2019.¹⁰⁷ According to the whistleblower and at least one other FAA official, the test was conducted utilizing one FAA Aircraft Certification Office (ACO) test pilot and one AEG test pilot who also participated on the 737 MAX Flight Standardization Board (FSB). The AEG pilot was only included in the test after a second ACO test pilot became unavailable. The whistleblower alleges Boeing officials were present for the testing and encouraged the test pilots to “remember, get right on that pickle switch” immediately prior to the exercise, which they acknowledged. “Pickle switch” refers to the stabilizer trim control switches, which adjust the horizontal stabilizer via electrical controls, enabling the pilot to quickly counter the MCAS action. According to the whistleblower, the FAA ACO test pilot reacted in approximately four seconds in accordance with the assumed reaction time. The AEG pilot reacted in approximately sixteen seconds, or four times longer than the accepted assumption of four seconds.

¹⁰⁵ The runaway stabilizer procedure includes holding the control column firmly, disengaging the autopilot and auto throttles (if engaged), setting the stab trim cutout switches to cutout, and trimming the airplane manually.

¹⁰⁶ QRC Sim Testing – *Runaway Stab Trim*, August 7, 2019, <https://www.commerce.senate.gov/services/files/3BBE2CD5-AE41-4048-9C50-DC7B59D644CB>

¹⁰⁷ *Ibid.*

The account of this test and its results were corroborated during an FAA staff interview as part of the Committee's investigation. The FAA employee interviewed was aware of the whistleblower's ad hoc testing and the official testing event. During the interview, the employee added he/she knew the whistleblower, and while the test was ad hoc, he/she respected the whistleblower and believed his/her claims were credible. The employee also independently confirmed the details and result of the test involving the ACO and AEG test pilots. When Committee investigators asked a second FAA employee about the official test and disparate results in a subsequent staff interview, DOT General Counsel objected and would not allow the employee to answer, citing the link to ongoing 737 MAX recertification efforts. Committee staff appealed and articulated the importance of oversight and the apparent misconduct the investigation had revealed. DOT counsel did not permit the employee to answer. It was the Committee's understanding that this second employee being interviewed was, in fact, the AEG test pilot who participated in the official test. DOT OGC provided no additional explanation as to why the second employee was not permitted to answer the same questions as the first employee. The time difference between interviewing the two employees was only a few weeks.

Based on corroborated whistleblower information and testimony during interviews of FAA staff, the Committee concludes FAA and Boeing officials involved in the conduct of this test had established a pre-determined outcome to reaffirm a long-held human factor assumption related to pilot reaction time to a runaway stabilizer. Boeing officials inappropriately coached test pilots in the MCAS simulator testing contrary to testing protocol. This test took place over a year after the second 737 MAX crash and during recertification efforts. It appears, in this instance, FAA and Boeing were attempting to cover up important information that may have contributed to the 737 MAX tragedies.

Dissuading FAA Employees from Contributing to OIG 737 MAX Investigation

Brian Rochester is the Division Manager for the Regulatory Standards Training Division at the Mike Monroney Aeronautical Center FAA Training Academy in Oklahoma City, Oklahoma. Mr. Rochester has worked for the DOT for approximately ten years, eight of which have been in the FAA. He began his career in aviation in the United States Air Force as an Aircraft Structural Repair Technician and in Aviation Flight Operations Resource Management. His experience spans over twenty-nine years. In addition to undergraduate and graduate degrees in Professional Aeronautics and Aeronautical Science and Safety, he holds a Doctor of Education in Aviation and Space Studies. Mr. Rochester consented to be identified in this report.

Mr. Rochester made disclosures to the Committee about the effectiveness of FAA training, including inefficiencies and waste. Specifically, Rochester described a disconnect between training development, delivery, and accountability for training outcomes in FAA Flight Standards. According to Rochester, Flight Standards often develops training based on their independent assessment without consulting or receiving input from experts. The training is then provided to the academy for delivery. The result, in Rochester's opinion, is a deficient training curriculum and improperly trained employees. Rochester contends this training deficiency extends to safety oversight and aircraft certification.

On April 1, 2019, Mr. Rochester accepted an invitation to participate in a DOT OIG review related to the 737 MAX crashes. Mr. Rochester told Committee investigators he looked forward to the opportunity to participate, as he has long held concerns related to training deficiencies in the FAA, including aircraft certification. Mr. Rochester further advised that his concerns were well known by management as he had been vocal about them, and the Flight Program 2014 Investigation highlighted in the improper training section of this report. Later the same day, Mr. Rochester was advised by the Director, Enterprise Operations, and Aircraft Certification Service that his input was not needed for the IG audit. Rochester questioned the change but was ultimately not permitted to participate in the audit. Rochester contends his role as the Division Manager for Regulatory Standards should have included him in such an IG effort. He believes he was excluded purposefully to shield the FAA from the criticism he would likely have provided in an IG interview. It is Rochester's understanding such behavior is in direct conflict with the intent and purpose of an IG effort and may constitute unethical conduct by his supervisor. Rochester advised that the conduct of management in the wake of the MAX tragedies compelled him to make disclosures to the Committee. The Committee has referred Mr. Rochester's allegations to the DOT OIG for investigation.

In March 2020, Mr. Rochester contacted the Committee to share additional concerns related to aircraft certification training. He described an FAA intent to remove aircraft certification training from the FAA Academy and contract it to Embry-Riddle. Mr. Rochester asserts this plan is wasteful and introduces a conflict of interest by having a private institution provide inherently governmental training to FAA staff.

Flight Standardization Board

The Committee received numerous concerns about the Flight Standardization Board (FSB). An FSB is responsible for determining requirements for pilot type ratings, development of training objectives, recommendations to use in the approval process of an operators training program, and to ensure initial flight crewmember competency. The FSB also conducts initial training for FAA Inspectors and the manufacturers' pilots. An FSB is typically comprised of a chairperson from the FAA Aircraft Evaluation Division, FAA operations Inspectors, FAA Office of Safety Standards representatives, and technical advisers from other FAA offices.¹⁰⁸

Committee staff interviewed two FAA employees with direct knowledge of the conduct of the 737 MAX Flight Standardization Board. They were also familiar with allegations made by whistleblowers and concerns raised by the Committee related to the Gulfstream VII FSB. The employees asserted that the 737 MAX FSB was conducted professionally and diligently. They were unaware of any pressure from FAA management to influence the proposed training requirements or general outcome of the FSB and subsequent certification of the 737 MAX aircraft. They acknowledged the existence of the Maneuvering Characteristics Augmentation System (MCAS) early in the evaluation and indicated the FSB removed it from consideration at

¹⁰⁸ U.S. Department of Transportation, Federal Aviation Administration, "Flight Standardization Board (FSB)," last modified July 9, 2020, https://www.faa.gov/aircraft/air_cert/airworthiness_certification/fsb/.

the request of Boeing Chief Technical Pilot Mark Forkner. One of the employees indicated that FSB Chairperson Stacy Klein received technical briefings related to this request. The FAA did not make Ms. Klein available to the Committee for an interview, despite an initial request almost a year ago.

Finding: During 737 MAX recertification testing, a Boeing employee inappropriately influenced FAA human factor simulator testing of pilot reaction times involving a Maneuvering Characteristics Augmentation System (MCAS) failure.

Finding: FAA Aircraft Certification Office (ACO) test pilots were complicit in skewing human factor simulator testing to support erroneous pilot reaction time to runaway stabilizer assumptions by Boeing.

Finding: The Department of Transportation’s Office of General Counsel (DOT OGC) failed to produce relevant documents requested by Chairman Wicker as required by the U.S. Constitution, Article 1.

Finding: The DOT OGC improperly redacted information in produced documents, hindering the Committee’s oversight investigation.

Finding: FAA senior leaders may have obstructed a Department of Transportation Office of Inspector General (DOT OIG) review of the 737 MAX crashes.

B. Abuse of the FAA’s Aviation Safety Action Program

The FAA uses Voluntary Safety Reporting Programs (VSRP) to provide regulators with important and useful safety data, while resolving non-compliance without enforcement action as much as possible.¹⁰⁹ In 2015, the FAA adopted a “Compliance Philosophy,” which relies upon the self-disclosure of errors and focuses on ensuring compliance with regulations instead of immediately taking enforcement actions.¹¹⁰ This philosophy allows the FAA to gather significant amounts of safety data from the aviation industry, which enables the FAA to track and identify safety trends. While compliance is a goal in this new philosophy, the FAA maintains that enforcement actions are still a tool to achieve safety goals. Among key qualifications when evaluating voluntary disclosures is that the “apparent violation was inadvertent.”¹¹¹

The Aviation Safety Action Program (ASAP) is one of these voluntary reporting programs and is often used by airline pilots. According to the FAA, “because of its capacity to provide early identification of needed safety improvements, an ASAP event offers significant

¹⁰⁹ U.S. Department of Transportation, Federal Aviation Administration, “Fact Sheet—Aviation Voluntary Reporting Programs,” April 12, 2016, https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=20214.

¹¹⁰ U.S. Department of Transportation, Federal Aviation Administration, *Compliance Program and Airman Rights* (Washington, DC, 2020), https://www.faa.gov/about/initiatives/cp/media/CP_Brochure.pdf.

¹¹¹ U.S. Department of Transportation, Federal Aviation Administration, *Voluntary Disclosure Reporting Program*, advisory circular 00-58B (Washington, DC, 2009), https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_00-58B.pdf.

potential for incident and accident avoidance.”¹¹² All ASAP reports are reviewed by an Event Review Committee (ERC) consisting of operator representatives, FAA officials, and a third party, usually a labor union member representative. The ERC must reach a unanimous decision on the disposition of ASAP reports, and if it does not, the FAA official on the ERC decides how the event will be resolved.¹¹³

ASAP allows pilots to report errors without receiving disciplinary enforcement actions when acceptance criteria are met and the reports are accepted by the ERC. The criteria includes the reported error not being related to criminal activity, substance abuse, controlled substances, alcohol, or intentional falsification. ASAP reports may also not be accepted in the cases of intentional disregard for safety, according to FAA guidance.¹¹⁴

Multiple FAA whistleblowers have contacted the Committee with allegations of widespread abuse of the ASAP system, often supported by FAA managers. These whistleblowers allege that pilots often submit ASAP reports about intentional actions they knew violated FAA regulations but carried out anyway. Whistleblowers say these events should not be accepted into ASAP because they are not inadvertent, and these pilots should not be shielded from corrective action. Whistleblowers allege that FAA officials, including senior managers, are aware of these abuses, but often refuse to hold offending parties accountable to keep relations with the carriers favorable.

Improper Repairs

A whistleblower contacted the Committee in June 2019 to share allegations of intentional abuse of ASAP retaliation and misconduct by management. The whistleblower has been an Aviation Safety Inspector (ASI) for nine years and was Chief Inspector for a 145 repair station for approximately seven years. Prior to that, he/she worked for United Airlines for nine years as maintenance technician and inspector. In one case of alleged abuse of ASAP while tasked with overseeing American Airlines, he/she discovered damage to a leading edge slat on an aircraft wing. This structure is critical to the safe functioning of an aircraft. He/she informed the pilot in charge of the flight, who chose not to enter the damage in the aircraft logbook as required. Entrance of the damage into the aircraft logbook would have required maintenance workers to examine the damage before allowing the flight to take off. As a result, he/she elevated the issue to the station manager of the airline and requested that maintenance workers inspect the damage. A maintenance technician arrived and determined that it was necessary to research the damage

¹¹² U.S. Department of Transportation, Federal Aviation Administration, *Designation of Aviation Safety Action Program (ASAP) Information as Protected from Public Disclosure under 14 CFR Part 193*, order 8000.82 (Washington, DC, 2003), https://www.faa.gov/documentLibrary/media/Order/Order_8000_82.pdf.

¹¹³ U.S. Department of Transportation, Federal Aviation Administration, *Aviation Safety Action Program (ASAP)*, advisory circular 120-66B (Washington, DC, 2002), https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC120-66B.pdf.

¹¹⁴ U.S. Department of Transportation, Federal Aviation Administration, *Volume 11 Flight Standards Programs: Chapter 2 Voluntary Safety Programs, Section 1 Safety Assurance System: Aviation Safety Action Program*, order 8900.1 CHG 0 (Washington, DC, 2014), https://fsims.faa.gov/wdocs/8900.1/v11%20afs%20programs/chapter%202/11_002_001.pdf.

further to ensure that it was within established tolerances before clearing the aircraft for take-off. The whistleblower immediately contacted the FAA Principle Maintenance Inspector (PMI) and advised of the situation. Before the flight was cleared, the maintenance technician continued research; however, the aircraft continued on with departing for Honolulu. Upon arrival, the damage was inspected and found to be within serviceable limits. The pilot later submitted an ASAP report concerning the incident, which was accepted. As a result, no corrective action or enforcement was initiated. While the flight arrived safely and the damage was within limits, the incident was still an intentional disregard for safety and abuse of the ASAP program.

The whistleblower immediately recommended an enforcement action be initiated against the airline, but was overruled by the Principle Maintenance Inspector (PMI). The whistleblower appealed to his/her FAA management about the improper handling of this event and was told to let the complaint go. He/she chose to elevate his/her concerns, which he/she believes triggered an FAA Management Inquiry into this and other concerns he/she had raised previously. The management inquiry, completed over twenty months after the incident, substantiated the facts of the case but found that the decision not to pursue legal action was warranted largely because the ASAP report had been accepted into the program and the airline had agreed to provide counseling to the pilot in question. This management action clearly undermined the ASI and is not compliant with the ASAP agreement or in the spirit of aviation safety.

In October 2017, while conducting a ground inspection of an American Airlines DC9-82 aircraft, the same whistleblower discovered three repaired dents on the right hand inboard leading edge slats. The dents had been repaired with a black compound which had deteriorated at the corners. Upon inspection, the whistleblower found there was no logbook entry related to this repair as required. He/she inquired further with the operator and was unable to find any documentation of the repair. During the investigations, the plane continued in revenue service for five days. Finally, the plane was ferried to Tulsa, Oklahoma, for repair. The leading edge slat was removed and replaced. The removed part was discarded and therefore not available for further evaluation and investigation. The whistleblower alleges the operator had performed an unauthorized and undocumented repair and upon confirmation intentionally discarded the part in question. The whistleblower was not supported by his manager in initiating an enforcement action. He/she had discovered an undocumented repair to a critical component which the carrier ignored and chose to operate in revenue service exhibiting a blatant disregard for safety. Again, the whistleblower's manager did not support any compliance or enforcement action and was irritated by his/her persistence.

In another incident while on an en-route flight inspection, the same whistleblower discovered an open discrepancy in the aircraft log book related to the auto-throttle on a Boeing 737 immediately prior to takeoff. The pilot in command called maintenance, who arrived and quickly signed off the log book as resolved. However, the technician did not complete the required test procedure to correct the issue as he signed off in the log book. The whistleblower challenged the technician on not completing the required test procedure. The technician asserted he did not need to, as it was just a light. However, the technician signed off indicating he had done the complete procedure, which eliminates other possible causes of a malfunctioned light.

The technician, even after being informed by the whistleblower about the incomplete procedure, refused to correct the erroneous sign off. The following day, the whistleblower learned the technician had submitted the incident to ASAP and it was accepted. Given the intentional nature of the incident, the whistleblower alleges it should have been excluded.

Following this event, the whistleblower was threatened by his management saying his “life was going to be hard” and other similar innuendo. The whistleblower believes this is due to his commitment to adhere to regulations and diligently conduct oversight in the interest of safety. He/she further states that holding the carrier compliant often results in complaints to his management and against him/her personally for doing his/her job.

The same whistleblower reported that the manager in charge of the ASAP program in his office was overheard saying that they would only deny an ASAP submission if it resulted in “murder.” He/she claims this was also heard and understood by fellow ASIs and operator employees. The whistleblower stated other FAA operator employees are afraid to speak out for fear of retaliation. This sentiment, combined with the acceptance of events that should be excluded, contradicts the purpose of the program by obscuring safety issues and trends as opposed to identifying and analyzing them, according to the whistleblower.

Southwest Airlines Flight 2169

On February 18, 2019, a particular day with inclement weather that brought down trees and power lines throughout the region, the pilot in command of Southwest Airlines flight 2169 made three attempts to land at Bradley International Airport in Connecticut despite wind shear alerts in the cockpit.¹¹⁵ These attempts resulted in both wing tips striking the runway, damaging the aircraft. FAA whistleblowers contend that attempting to land in a known wind shear condition is a violation of the carrier’s internal guidance. After three attempts, the flight diverted to a different airport and landed successfully in Rhode Island. This event was submitted to and accepted into ASAP. ASAP acceptance guidance requires that errors be inadvertent, but whistleblowers contend that this event was far from inadvertent.

Southwest Airlines Flight 278

On December 6, 2018, Southwest Airlines flight 278, landing at Burbank Airport in California, overran the runway and was stopped by the Engineered Material Arresting System (EMAS) designed to stop runaway aircraft.¹¹⁶ FAA whistleblowers contend that the crew attempted to execute an approach that was unstable below the appropriate altitude and should

¹¹⁵ Kenneth R. Gosselin, “A Southwest Plane Scraped the Runway While Trying To Land at Bradley during High Winds; Feds Want To Know What Happened,” *Hartford Courant*, February 26, 2019, <https://www.courant.com/business/hc-biz-southwest-airlines-bradley-rough-weather-20190226-r5pe6cchf5eylc6edtmx3z25ki-story.html>.

¹¹⁶ Aviation Safety Network, “ASN Wikibase Occurrence #219098,” last modified December 8, 2020, <https://aviation-safety.net/wikibase/wiki.php?id=219098>.

have gone around for a second attempt. As a result, the plane touched down too far down the runway.

Additionally, FAA whistleblowers state that the pilots attempted to veer the plane off to the side before hitting the EMAS. The plane continued sliding forward, but FAA whistleblowers state that if the maneuver had succeeded, the results could have been tragic. Committee staff have reviewed investigative documentation corroborating these claims. Again, FAA whistleblowers contend that the incident should not have been accepted into ASAP because the pilots in question knowingly disregarded federal regulations, which whistleblowers allege is evidenced by cockpit recordings. The incident was accepted into ASAP, and as a result the pilots were not initially made available to FAA investigators for interview. Whistleblowers with direct knowledge indicate the carrier did require the pilots involved in the incident to receive internal remedial training. According to multiple whistleblowers, one of the pilots failed the remedial training the first time and passed on the second attempt. The FAA had no input or oversight of the training and never required FAA supervised 44709 check rides. A National Transportation Safety Board (NTSB) investigation into the incident is ongoing.

Flight Control Malfunctions

Patrick Minnehan has been with the FAA as an ASI for thirteen years, and twelve years as an ASAP Manager. Before joining the FAA, Inspector Minnehan spent thirty years as an American Airlines Line Pilot check airman, Aircrew Program Designee (APD), Chief Pilot at DFW, USAF Capt. Instructor Pilot, Standardization and Evaluation Pilot, and Instructor Aircraft Commander. Inspector Minnehan has approximately 20,000 combined flight hours. Inspector Minnehan stated that in at least two instances, when a Southwest Airlines flight lost electric stabilizer trim controls for an undetermined reason, the pilots chose to continue on to their destination instead of turning back. Minnehan and several other whistleblowers stated that turning back would have been a far safer course of action. These incidents were accepted into ASAP. It is unknown if these incidents were submitted to NTSB as required.¹¹⁷

In a separate case in January 2020 involving Southwest Airlines, FAA whistleblowers reported that during takeoff, a first officer reported a malfunction in the flight elevator, a core component of a plane's flight control. The pilot in command elected to continue on with their flight instead of turning back, and encountered the same malfunction en-route, and upon arrival at their destination. Instead of reporting the issue to maintenance, they again chose to fly another leg, encountering the issue again during takeoff, en-route and on arrival. Upon arrival at their second destination, they reported the issue, and the plane was grounded for at least four days for maintenance, according to FAA whistleblowers.

Upon inspection, it was found that a flight control cable was misrouted. As a result, the cable had been rubbing against the aircraft's internal structure. This rubbing damaged both the

¹¹⁷ U.S. Department of Transportation, Federal Aviation Administration, *Aircraft Accident and Incident Notification, Investigation, and Reporting*, order 8020.11D (Washington, DC, 2018), https://www.faa.gov/documentlibrary/media/order/faq_order_8020.11d.pdf.

cable and internal structure while causing the flight controls to bind. Flying under these conditions can be challenging and could lead to loss of control.¹¹⁸ Despite the intentional nature of the event, Southwest Airlines requested that it be accepted into the ASAP program and that the pilot be shielded from any potential enforcement action. According to Inspector Minnehan the flight crew involved violated the following CFRs: §91.13, §91.213, §91.403, §91.405, §121.303, §121.315, §121.363 and §121.563.

This incident was not reported to the NTSB immediately as required. Only after repeated inquiries by Mr. Minnehan, the ASAP manager at the time, was the incident finally reported. According to 49 CFR § 830.5, flight control malfunctions and incidents must be reported to the NTSB immediately.¹¹⁹ The incident was submitted to ASAP on January 30, 2020, and excluded on February 13, 2020. Inspector Minnehan excluded the event but Southwest kept the case open. FAA management and Southwest continued to pressure Inspector Minnehan to accept the event; however, he refused. Only after Mr. Minnehan's departure as the ASAP manager on March 15, 2020, did the new ASAP manager accept the event into ASAP in April 2020. The event was reported to the NTSB on February 14, 2020, two weeks after the event. In a February 18, 2020, email, a Southwest Airlines Safety employee explained to the Southwest Director of Safety Management Systems that the regulation requiring immediate reporting of flight control malfunctions is "very gray" and they had "spoken to the NTSB on Friday and they confirmed that this was not reportable."

Further investigation revealed the misrouted flight control cable was the result of a previous improperly completed repair to the elevator feel bearing. The previous repair required the removal of flight control cables which were subsequently not replaced in accordance with prescribed procedure, resulting in a misrouting of the cables. This was discovered upon inspection following the pilot ASAP submission due to the binding flight control.

Despite the repair having been completed while intentionally disregarding the proper procedure, a maintenance ASAP was submitted and accepted for the initial repair. Review of the documents revealed that the pilot ASAP program improperly cited the elevator feel bearing as the cause of the flight control malfunctions experienced by the pilots. In fact, the cause was the misrouted cable, not the elevator feel bearing which had been replaced. Extensive investigation was required to determine this error due to redactions of routine maintenance documents and aircraft log pages by the Southwest Airlines pilot ASAP program. The redacted documents created an appearance of the initial elevator feel bearing repair as the cause of the flight control malfunctions reported in the pilot ASAP. No mention of the misrouted flight control cable was ever disclosed or included in any of the pilot ASAP submissions. Inspector Minnehan asserts these actions were intentional and misinformed the ASAP program to hide the improper repair which was the true cause of the malfunction.

¹¹⁸ U.S. Department of Transportation, Federal Aviation Administration, "Chapter 17: Emergency Procedures," *Airplane Flying Handbook*, (Washington, DC, 2016) https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/airplane_handbook/media/19_afh_ch17.pdf.

¹¹⁹ Cornell Law School, Legal Information Institute, "49 CFR § 830.5 – Immediate Notification," <https://www.law.cornell.edu/cfr/text/49/830.5#>.

Inspector Minnehan reports that while he was the ASAP manager, on average 100-150 events were submitted to ASAP each week, with over 65,000 events being submitted since 2004. According to Inspector Minnehan and multiple whistleblowers, an increasing number of these events are accepted despite disqualifying criteria such as intentional disregard for safety. These practices contradict the purpose and spirit of the program by hiding risks instead of identifying and mitigating them properly.

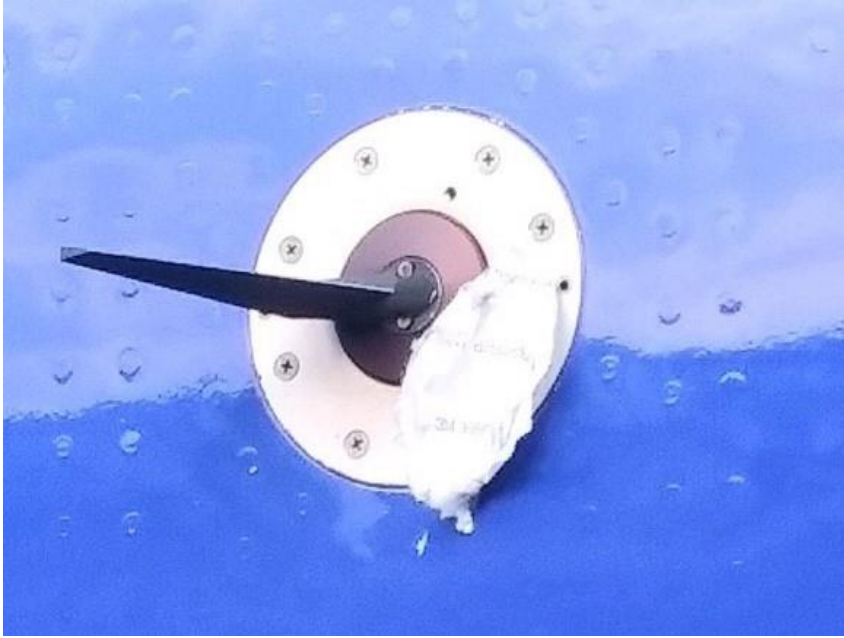
Angle of Attack Sensor

As a result of the two 737 MAX tragedies, many in the general public have become aware of the importance of the Angle of Attack (AoA) sensor and related systems. The AoA measures and reports the pitch of the nose of the airplane to flight systems. While the Boeing 737NG does not have the Maneuvering Characteristics Augmentation System (MCAS) implicated in the two 737 MAX crashes, it utilizes AoA to inform other vital flight systems.¹²⁰ Recently, a first officer for Southwest Airlines conducted an external preflight inspection of a 737NG he was about to fly. While doing so, he pointed out foreign objects on the airplane to the captain. The captain acknowledged it and took no action. The flight departed for Fort Lauderdale and arrived safely. The pilot did not notate the foreign objects in the aircraft log-book or advise anyone of them as required.¹²¹

According to then-FAA ASAP Manager Patrick Minnehan, the same crew flew an additional leg to San Juan, Puerto Rico, and arrived safely. Again, no log entry or notification was made to anyone. That same day, a subsequent flight crew conducted its preflight inspection and were alerted to the foreign objects. After additional inspection, the foreign objects were determined to be duct tape on both AoA. This crew made the required log book entries. Committee staff reviewed pictures and were told by FAA whistleblowers that the sensors had been taped in place and could have caused erroneous information to flight systems resulting in unsafe flight. FAA whistleblowers state that the sensors were taped in place for calibration purposes, but maintenance personnel neglected to remove the tape afterwards. Fortunately, the sensors were able to break free of the tape during initial takeoff. According to FAA whistleblowers, had they not, the result could have been catastrophic. Below is a picture of the taped AoA described above.

¹²⁰ Komite Nasional Keselamatan Transportasi, Republic of Indonesia, *Aircraft Accident Investigation Report*, KNKT.18.10.35.04 (KNKT: Republic of Indonesia, 2019), http://knkt.dephub.go.id/knkt/ntsc_aviation/baru/2018%20-%20035%20-%20PK-LQP%20Final%20Report.pdf.

¹²¹ Cornell Law School, Legal Information Institute, “14 CFR 91.213 – Inoperative Instruments and Equipment,” <https://www.law.cornell.edu/cfr/text/14/91.213>.



Inspector Minnehan advised that the carrier initially did not allow the crew to be interviewed. After additional discussion, the carrier reportedly agreed to allow the crew to be interviewed only if the events were accepted into ASAP unconditionally before the interviews took place. Inspector Minnehan refused this proposal, and as a result the crew was never interviewed by FAA as part of the Emergency Response Team (ERT). The event remained open for several weeks despite having been excluded. Subsequently, following the departure of Inspector Minnehan as ASAP manager, newly assigned FAA personnel conducted a new review of the event and accepted it based on the finding of no CFR violations despite the record clearly identifying numerous CFR violations.¹²²

Appeals to FAA Managers for ASAP Event Exclusions

Committee investigators obtained documentation which supports allegations of a pilot association's appeal to the FAA Administrator's office to address "personality issues" with an FAA ASAP Emergency Response Team (ERT) member. Several carriers have lodged complaints of unprofessional conduct against FAA inspectors after they refused to accept events submitted in ASAP. In many cases, these allegations were unsubstantiated but succeeded in chilling enforcement efforts, according to several whistleblowers. Examples include the flight control malfunction event, taped AoA sensor, and the damage to a leading edge slat. In Inspector Minnehan's case, Southwest appealed to FAA management and requested a new FAA ASAP manager be assigned to the ERC. Despite the events having been excluded, the carrier had refused to close them out in their internal ASAP information system.

¹²² Cornell Law School, Legal Information Institute, "14 CFR 13.1 – Reports of Violations," <https://www.law.cornell.edu/cfr/text/14/13.1>.

Inspector Minnehan left his position as ASAP manager due to a promotion opportunity and a lack of management support in properly managing the ASAP program in accordance with guidance and favoring the carrier. This conduct over several years resulted in a contentious and increasingly hostile environment. In March 2020, Inspector Minnehan promoted to Assistant Principal Operations Inspector (POI) for the Southwest Certificate Management Office (CMO).

According to Inspector Minnehan, the voluntary disclosure programs are a valuable tool but are only as good as the information input which relies on full disclosure and cooperative transparency. In his experience, this is not always the case. As a result, these programs may provide the Safety Management System (SMS) with incomplete information regarding events which might benefit from a root cause analysis and appropriate corrective actions. Unfortunately, when these principles are pursued the result is retaliation and personal character assassination of the ASI involved.

The Committee spoke to Mr. Jose Portela in April of 2020. Mr. Portela is currently an Aviation Safety Inspector at the FAA Southwest Airlines CMO. He assists with the ASAP program and worked for former ASAP Manager Patrick Minnehan. Prior to working for the FAA, Inspector Portela worked for U.S. Airways for thirty-two years, including as a check airman. He was awarded the Superior Airmanship Plaque, the highest award given by the Airline Pilots Association (ALPA) for “demonstrating extraordinary flying skills and professionalism in the face of adversity, for safely recovering an aircraft with severe flight control problems, exemplifying the best of what a pilot can offer to those who have placed their lives in his hands.”¹²³ Inspector Portela is a highly decorated veteran of forty-three years (active, reserve, and guard) in the United States Air Force (USAF), achieving the rank of Brigadier General. He has over 20,000 combined flight hours. Inspector Portela provided independent corroboration for several ASAP events described by Inspector Minnehan. Mr. Portela also supports the criticism and concerns shared by Inspector Minnehan.

ASAP Data Analysis

The FAA has and continues to promote the value of voluntary disclosure programs, including ASAP supported by the “data-driven” and risk-based safety and inspection philosophy adopted by the FAA and routinely briefed to Congress and the public.¹²⁴ In 2012, the Department of Transportation Office of Inspector General (DOT OIG) and FAA investigated a hotline complaint H12E047CC, in which an FAA employee alleged retaliation for cooperating with a DOT OIG audit. Office of Audit and Evaluation (AAE) found that the whistleblower had, in fact, been retaliated against for providing complete and candid information requested by the DOT OIG. Management took exception to the thoroughness of the information he/she provided,

¹²³ United States Air Force, *Brigadier General Jose M. Portela*, July 31, 2004, <https://www.af.mil/About-Us/Biographies/Display/Article/559890/brigadier-general-jose-m-portela/>

¹²⁴ U.S. Congress, Senate, Committee on Commerce, Science, and Transportation, *Examining the Federal Aviation Administration’s Oversight of Aircraft Certification: Hearing Before the Committee on Commerce, Science, and Transportation*, 116th Cong., 2d sess., June 17, 2020 (prepared statement of Stephen M. Dickson, Administrator, Federal Aviation Administration), <https://www.commerce.senate.gov/services/files/2CD68098-DD6D-46FA-BD49-2796F03C1B60>.

as it was contrary to what the FAA had represented to Congress and the public. The whistleblower disclosed and the DOT OIG confirmed that voluntary data, including ASAP and the Flight Operational Quality Assurance (FOQUA) data, were collected. However, the FAA did not permit analysis due to the sensitive nature of the information. The whistleblower's disclosures revealed that because the information was not accessible it was not part of any analysis conducted by the FAA. The whistleblower provided documented requests for access to the information for the purpose of safety analysis and was repeatedly denied.

In 2009, the Department of Transportation's Office of Inspector General released an audit report that found that the FAA's ineffective implementation and inadequate guidance have allowed inconsistent use and potential abuse of ASAP.¹²⁵ Four of the eight recommendations remain open, including ones to exclude accidents from the program, to clarify that ASAP is not an amnesty program, to require inspectors to examine repetitive reports if there are safety concerns to ensure corrective action is taken, and to require that FAA ERC members receive ASAP reports in a timely manner.

ASAP can be a valuable tool that allows the FAA to gather significant amounts of safety data that is used to help the FAA and the aviation industry identify possible safety concerns or trends that should be addressed. However, ASAP should be managed and enforced in accordance with relevant orders, regulations, and agreements. The Committee has spoken to dozens of FAA inspectors, managers, union representatives, and pilots about the effectiveness of ASAP. The common theme from these conversations is that ASAP is being abused by the participants to avoid enforcement actions, thereby obscuring potentially valuable safety information. Whistleblowers contend that this is a grave safety issue and must be addressed by senior officials in the FAA.

Compliance Philosophy

In 2015, the FAA adopted the "Compliance Philosophy," which relies upon the self-disclosure of errors and focuses on ensuring compliance with regulations instead of having the agency immediately take enforcement actions.¹²⁶ This new philosophy allows the FAA to gather significant amounts of safety data from the aviation industry, which enables the FAA to track and identify safety trends.

Interviews with both frontline employees and managers reveal an internal divide with respect to opinions about the efficacy of the FAA's compliance philosophy. Some frontline employees believe the agency ignores laws and regulations, to the detriment of public safety in order to accommodate the compliance philosophy. Some managers, on the other hand, often feel that frontline employees are overly aggressive in their application of laws and regulations, as

¹²⁵ U.S. Department of Transportation, Office of the Secretary of Transportation, Office of Inspector General, FAA *Is Not Realizing the Full Benefits of the Aviation Safety Action Program*, AV-2009-057 (Washington, DC, 2009), https://www.oig.dot.gov/sites/default/files/WEB_FILE_ASAP_Final_Report_May_14_ISSUED.pdf.

¹²⁶ U.S. Department of Transportation, Federal Aviation Administration, *Compliance Program and Airman Rights* (Washington, DC, 2020), https://www.faa.gov/about/initiatives/cp/media/CP_Brochure.pdf.

well as excessively confrontational with the carrier. This friction leads to distrust, miscommunication, and unnecessary escalation of minor issues.

Multiple senior officials interviewed by the Committee indicated that ASIs have a significant amount of discretion related to compliance. They refer to these examples of discretion as “technical non-compliance.” FAA officials explained that these are instances where a certificate holder may not be compliant with regulations, but ASIs are encouraged to apply a risk matrix to evaluate whether a risk exists. Two managers interviewed confirmed that this process is not codified in policy or recognized by regulation, but is encouraged as part of the compliance philosophy. ASIs told Committee staff that they have no latitude on this subject. They stated that if an ASI did what these managers suggest is allowable, they could be found to be derelict in their duties.¹²⁷

During Committee interviews of FAA employees, questions were posed regarding the compliance philosophy. As discussed above, ASAP allows operator employees to report errors without receiving enforcement actions if the report meets certain parameters, such as being unrelated to criminal activity, substance abuse, controlled substances, alcohol, or intentional falsification. One manager interviewed seemed knowledgeable about the program and was able to identify the factors that disqualify an event from ASAP, including intentional acts. However, when asked about a flight control malfunction caused by the misrouted elevator cables described in the flight control malfunction section of the report, the manager assured the Committee it was handled properly. Committee staff presented the manager with the details of the case and the manager agreed, based on what was presented, that it should not have been accepted. Committee staff shared additional detail about the preceding maintenance event that the agency also accepted into ASAP. The senior manager, when presented with the specifics of the case, agreed that, as described, the FAA should have also excluded this maintenance event. Committee investigators asked two FAA employees if operators are required to report flight control malfunctions to the NTSB. The managers were not aware of this requirement. In fact, CFR¹²⁸ requires flight control malfunctions to be reported to the NTSB immediately by the operator.¹²⁹ The manager also had no explanation when Committee staff shared information related to additional flight control malfunctions that were also accepted into ASAP. It is unclear how many, if any, of these other events were reported to the NTSB. Indeed, it took Inspector Minnehan several weeks and multiple inquiries about reporting requirements before the operator finally reported the event to the NTSB. The interviews of these managers raise concerns about their knowledge and ability to lead a highly technical regulatory organization. The attitude and tone exhibited regarding identified whistleblowers was disturbing.

¹²⁷ U.S. Department of Transportation, Federal Aviation Administration, *FAA Compliance and Enforcement Program*, order 21503C (Washington, DC, 2018), https://www.faa.gov/documentLibrary/media/Order/FAA_Order_2150.3C.pdf.

¹²⁸ Cornell Law School, Legal Information Institute, “49 CFR 830.5 – Immediate Notification,” <https://www.law.cornell.edu/cfr/text/49/830.5>.

¹²⁹ U.S. Department of Transportation, Federal Aviation Administration, *Aircraft Accident and Incident Notification, Investigation, and Reporting*, order 8020.11D (Washington, DC, 2018), https://www.faa.gov/documentLibrary/media/order/faa_order_8020.11d.pdf.

The FAA's Relationship with Regulated Entities

Frontline inspectors and managers at the FAA report that the agency sometimes struggles to present a unified face to entities that it regulates. Several carriers and operators engaged by the Committee confirmed this perception. In fact, employees from several airlines claimed ASAP was “sold” to them as a “get out of jail free card.” Every whistleblower the Committee engaged on this topic concurred with this statement. The friction between frontline employees and FAA managers described above contributes to this issue. Whistleblowers stated that representatives of airlines routinely contact FAA managers when they disagree with the decisions of frontline inspectors tasked with regulatory oversight. FAA officials confirmed this fact during interviews. For example, whistleblowers alleged that acting Administrator Elwell and Southwest Airlines senior executives have close personal relationships and communicate frequently. One FAA senior manager asserted that Southwest Airlines Chief Operating Officer Mike Van de Van referenced the relationship in a meeting with representatives from the FAA and the carrier. Whistleblowers contend that this type of conduct is inappropriate and indicative of a relationship between some officials at the FAA and carriers that lacks integrity. A senior official at Southwest Airlines also told the Committee that the perceived relationship Southwest senior executives and Mr. Elwell is well known in the company and has been invoked periodically to get favorable treatment from the local FAA CMO. The committee observed systemic FAA management intervention with FAA Inspectors to favor Southwest Airlines in its review of related documents. In a February 2020 Southwest Airlines Pilots Association letter, the organization cites its relationship with the FAA Administrator and an apparent willingness to intervene in ASAP specifically.¹³⁰ Personal relationships between FAA employees and regulated industry officials are not prohibited. However, the circumstances and perceptions supported by documented communications reviewed by Committee investigators suggest numerous instances of potential conflicts of interest at the very least.

Finding: Operators accept Aviation Safety Action Program (ASAP) events which do not meet the requirements of the ASAP program, such as intentional acts and willful disregard for safety.

Finding: FAA management is complicit in accepting ASAP events which are not eligible as defined by program parameters.

Finding: Acceptance of intentional acts of forbidden ASAP events may obscure trends from analysis while not holding employees accountable.

Finding: ASAP data was not effectively collected and analyzed by the FAA.

Finding: Commercial airlines and other operators appeal to FAA managers to influence the Event Review Committee (ERC) acceptance decisions, thereby undermining the integrity and value of the ASAP program.

¹³⁰ Southwest Airlines Pilots Association, *The DOT OIG Report on Safety – The Time for a New Mindset is Long Overdue*, February 13, 2020, <https://www.commerce.senate.gov/services/files/09D522F0-0D4A-4B0F-8D89-3849C21D7456>

Finding: FAA has not consistently communicated its oversight and enforcement role, especially with regard to voluntary reporting programs.

C. Atlas Airlines

Atlas Airlines is an air carrier operating under 14 CFR Part 121. Polar Air Cargo and Southern Air are all independent air carriers who are required by regulation to operate under their individual FAA certificates, but owned together by Atlas Air Worldwide Holdings.¹³¹ This requirement ensures that certificate holders have sufficient training, maintenance, and operations policies and procedures implemented to address their specific operations. These requirements are defined and documented in Operations Specifications.¹³²

According to their website, Atlas Air is the largest cargo carrier in the United States and is known for transporting a significant amount of cargo for Amazon.¹³³ A merger of Polar Air Cargo, Southern Air, and Atlas Air commenced in 2016 but remains incomplete.¹³⁴ The CAVOK Group is a company playing an integral part in the merger. CAVOK Group employs a retired FAA employee on staff in an executive position. This employee appears to have previously retaliated against an FAA whistleblower while employed at the FAA, as discussed in this section of this report.¹³⁵

The Department of Transportation's Office of the Inspector General in 2016 found that the FAA was not well positioned to determine how often pilots have enough experience in air carrier training or flying skills.¹³⁶ As reported in a Miami Herald article on June 12, 2019, Atlas Air executives were aware of training deficiencies and concerns about pilots as early as January 2017.¹³⁷ After this acknowledgement of serious concerns regarding pilot proficiency, Atlas Air

¹³¹ U.S. Securities and Exchange Commission, *Form 10-K: Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the Fiscal Year Ended December 31, 2012: Atlas Air Worldwide Holdings, Inc.*, <https://www.sec.gov/Archives/edgar/data/1135185/000119312513054466/d450612d10k.htm>.

¹³² U.S. Department of Transportation, Federal Aviation Administration, *Volume 3 General Technical Administration, Chapter 18 Operations Specifications, Section 3 Part A Operations Specifications—General*, 89000.1 CHG 179 (Washington, DC, 2011), https://fsims.faa.gov/WDocs/8900.1/V03%20Tech%20Admin/Chapter%2018/03_018_003_CHG_179A.htm.

¹³³ Atlas Air, "About Us: History," <https://www.atlasair.com/about-us/history/>.

¹³⁴ Atlas Air/IBT, System Board of Adjustment, *In the Matter of the Arbitration Between International Brotherhood of Teamsters Airline Division, and Teamsters Local Union No. 1224 - and - Atlas Air, Inc.* (August 2019), <http://www.atlasairworldwide.com/wp-content/uploads/2019/08/Atlas-IBT-Opinion.pdf>.

¹³⁵ Memorandum for Record, March 14, 2014, April 18, 2014, <https://www.commerce.senate.gov/services/files/621F43CC-9CFE-45AE-BA35-CD5EF9A60FC4>

¹³⁶ U.S. Department of Transportation, Office of the Secretary of Transportation, Office of Inspector General, *Enhanced FAA Oversight could Reduce Hazards Associated With Increased Use of Flight Deck Automation*, AV-2016-013 (Washington, DC, 2016), https://www.oig.dot.gov/sites/default/files/FAA%20Flight%20Deck%20Automation_Final%20Report%5E1-7-16.pdf.

¹³⁷ Taylor Dolven, "Pilots at MIA's Biggest Cargo Airline Warned Execs a Crash Was Coming. Then a Plane Went Down," *Miami Herald*, June 12, 2019, <https://www.miamiherald.com/news/business/tourism-cruises/article230569724.html>

has been involved in numerous incidents, including a runway overrun in Japan in July 2017,¹³⁸ a near ground collision in Hong Kong in September 2017,¹³⁹ hard landing with engine 4 hitting the ground in Marana, Arizona, in December 2019, and an extremely hard landing in Portsmouth, New Hampshire, in July 2018.¹⁴⁰ The Portsmouth landing required significant structural repairs and was a near total hull loss.

On February 23, 2019, Atlas Air Flight 3591 crashed into Trinity Bay near Houston, Texas, killing all three crewmembers on board. On July 14, 2020, National Transportation Safety Board (NTSB) released an abstract of their final report that states that the first officer had fundamental weaknesses in his flying aptitude and stress response.¹⁴¹ The report found the first officer on Flight 3591 had a long history of training performance difficulties and deliberately hid those deficiencies from Atlas Air. The NTSB “determined that the probable cause of this accident was the inappropriate response by the first officer as the pilot flying to an inadvertent activation of the go-around mode, which led to his spatial disorientation and nose-down control inputs that placed the airplane in a steep descent from which the crew did not recover.”¹⁴²

The NTSB also stated that had the Federal Aviation Administration met the deadline and complied with the requirements for implementing the pilot records database (PRD) as stated in section 203 of the Airline Safety and Federal Aviation Administration Extension Act of 2010,¹⁴³ the Pilot Record Database (PRD) would have provided hiring employers relevant information about the first officer’s employment history and training performance deficiencies.¹⁴⁴ The NTSB report noted that, “[also,] contributing to the accident was the Federal Aviation Administration’s failure to implement the PRD in a sufficiently robust and timely manner.”¹⁴⁵

In April 2020, investigative staff spoke with whistleblower Mr. Thomas Clemmons, an FAA Aviation Safety Inspector (ASI) with eighteen years of experience in the FAA, including four years as a team leader for the Certification Evaluation Program Office (CEPO). Inspector Clemmons previously worked for several Part 121, 135, and 125 carriers, including positions as Instructor Pilot, Check Airman, and Chief Pilot Director Operations. He is considered by the

¹³⁸ Aviation Safety Network, Flight Safety Foundation, “ASN Wikibase Occurrence # 197257,” last modified December 4, 2020, <https://aviation-safety.net/wikibase/wiki.php?id=197257>.

¹³⁹ Aviation Safety Network, Flight Safety Foundation, “ASN Wikibase Occurrence # 199972,” last modified December 3, 2020, <https://aviation-safety.net/wikibase/wiki.php?id=199972>.

¹⁴⁰ Aviation Safety Network, Flight Safety Foundation, “Database, 2018,” last modified December 7, 2020, <https://aviation-safety.net/database/record.php?id=20180727-1>.

¹⁴¹ National Transportation Safety Board, synopsis of *Rapid Descent and Crash Into Water, Atlas Air Inc. Flight 3591, Boeing 767-375BCF, N1217A, Trinity Bay, Texas, July 14, 2020* (2020), <https://www.nts.gov/news/events/Documents/2020-DCA19MA086-BMG-abstract.pdf>.

¹⁴² National Transportation Safety Board, *Rapid Descent and Crash Into Water, Atlas Air Inc. Flight 3591, Boeing 767-375BCF, N1217A, Trinity Bay, Texas, July 14, 2020*, NTSB/AAR-20/02 (Washington, DC, 2020), <https://www.nts.gov/investigations/AccidentReports/Reports/AAR2002.pdf>.

¹⁴³ *Airline Safety and Federal Aviation Administration Extension Act of 2010*, Public Law 111-216 (2010), <https://www.govinfo.gov/content/pkg/PLAW-111publ216/pdf/PLAW-111publ216.pdf>.

¹⁴⁴ “Pilot Records Database, Notice of Proposed Rulemaking” *Federal Register* 85, no. 61 (March 30, 2020): 17660, <https://www.govinfo.gov/content/pkg/FR-2020-03-30/pdf/2020-04751.pdf>.

¹⁴⁵ National Transportation Safety Board, synopsis of *Rapid Descent and Crash Into Water, Atlas Air Inc. Flight 3591, Boeing 767-375BCF, N1217A, Trinity Bay, Texas, February 23, 2019* (2020), <https://www.nts.gov/news/events/Documents/2020-DCA19MA086-BMG-abstract.pdf>.

FAA to be a Subject Matter Expert (SME) in training of flight crew members. In line station operations he has approximately 12,000 total combined flight hours, and 10,000 as Pilot in Command (PIC). Inspector Clemmons shared numerous disclosures with Committee staff alleging violations of regulations undermining aviation safety and retaliation and misconduct by FAA managers. Inspector Clemmons worked on the FAA's National Certificate Holder Evaluation Process (CHEP) for both Atlas Airlines and Polar Air Cargo in 2019. According to the FAA a "national CHEP evaluates part 121 air carriers, part 145 repair stations, and part 135 certificate holders for regulatory compliance on a five-year schedule."¹⁴⁶ Inspector Clemmons has participated in over twenty-five previous CHEP Inspections and as team leader for approximately half of them. Inspector Clemmons stated that the findings for each evaluation for Atlas, Polar, and Southern were the worst he had ever seen for any certificate holder.

During the Atlas Air inspection, Inspector Clemmons discovered that the Principle Operations Inspector (POI) for the local Certificate Management Office (CMO) had authorized Polar Air Cargo to transfer its pilots to the Atlas Airline's training program to satisfy requirements for pilot training in 2011.¹⁴⁷ The CHEP team that Inspector Clemmons was working on was unable to find any regulation or FAA guidance that provided such authority to the POI.¹⁴⁸ According to 14 CFR Part 121.401(a) (1) Training Program, each operator must provide enough flight instructors and approved check airmen to conduct the flight training and checks required under this part.¹⁴⁹ Currently, CMO and Flight Standards management assert Atlas and Polar Air are in compliance with following the FAA's rules and regulations and maintaining all documentation required by the FAA due to this memo granted by the POI in 2011.¹⁵⁰ This memo appears to be an indirect conflict with 14 CFR 121.401(a). This deviation also appears to perpetuate findings related to insufficient training and oversight of check airmen and related activities cited in a 2017 DOT OIG report.¹⁵¹

In a memo¹⁵² on October 16th, 2019, the Assistant Manager for the FAA's Certification and Evaluation Program Office stated that federal regulations require that each certificate holder shall provide its own flight instructors, simulator instructors, and approved check airmen to

¹⁴⁶ U.S. Department of Transportation, Federal Aviation Administration, "Safety Analysis & Promotion Division Certification and Evaluation Program Office," last modified November 30, 2020,

https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs900/afs910/certeval/.

¹⁴⁷ U.S. Securities and Exchange Commission, *Form 10-K: Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the Fiscal Year Ended December 31, 2012: Atlas Air Worldwide Holdings, Inc.*, <https://www.sec.gov/Archives/edgar/data/1135185/000119312513054466/d450612d10k.htm>.

¹⁴⁸ Atlas Air Polar, *Crewmember Services Agreement*, March 2, 2011,

<https://www.commerce.senate.gov/services/files/5344EA59-BB8A-4F04-84DC-B2243786240A>

¹⁴⁹ Cornell Law School, Legal Information Institute, "14 CFR § 121.401 Training Program: General," <https://www.law.cornell.edu/cfr/text/14/121.401>.

¹⁵⁰ *Ibid.*

¹⁵¹ U.S. Department of Transportation, Office of Inspector General, *FAA Has Not Ensured All Check Pilots Meet Training and Observation Requirements*, AV2017050 (Washington, DC, 2017), <https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Check%20Pilots%20Final%20Report%5E5-31-17.pdf>.

¹⁵² United States Department of Transportation, Federal Aviation Administration, Memorandum, October 16, 2019, <https://www.commerce.senate.gov/services/files/DE968235-5514-4751-A99A-0477D52BE323>

conduct the required training and checking.¹⁵³ Inspector Clemmons has continued to inquire about the status of this finding and non-compliance while escalating the issue to FAA senior management. He has not received a conclusive response to date. While elevating concerns, a Senior FAA Manager at CMO told Inspector Clemmons' supervisor that Inspector Clemmons needed to "leave it alone." Inspector Clemmons perceived this communication as a threat of retaliation for doing his job correctly.

According to emails reviewed by the Committee, an official from AFS 280 stated in a meeting, "we have been letting them operate outside the regulations since 2011, how are we going to tell them they have to stop."¹⁵⁴ AFS 280 is the Air Transportation Division, Air Carrier Training Systems and Voluntary Safety Reporting Programs (VSRP) Branch.¹⁵⁵

Another FAA official stated to Committee staff that this issue was appealed to Office of Safety Standards (AFS) 200 in October 2019. AFS 200 is responsible for managing, developing, evaluating, operational policies and guidance for air carrier operations aspects of 14 CFR part 121, 63, and 65; while providing consistent and timely information to internal and external stakeholders.¹⁵⁶ After eight months, the matter was finally elevated to the Director level of the FAA and received no decision. Finally, in July 2020, the matter was referred to the FAA Office of General Counsel where it remains under consideration.

During staff interviews conducted by the Committee in July 2020, Committee staff asked why an opinion had not been provided by FAA counsel over a year later. A senior flight standards leader acknowledged the issue and advised it was being considered by AGC. Committee staff reiterated this question again on August 25, 2020, to DOT general counsel and have yet to receive a response. Inspector Clemmons indicated he has filed a complaint with the OSC which was accepted and referred to the DOT OIG for investigation.

The Committee spoke to whistleblower Mr. Greg Schaper in May 2020. Inspector Schaper is currently the Principle Operations Inspector (POI) for Air Transport International. Inspector Schaper has been an Inspector in the FAA for thirteen years. While in the FAA, he has worked as a General Aviation, ASI, and POI. More recently he served as an ASI and APOI for Southern Air and as the POI for Atlas, Polar, and Southern for approximately three years. Prior to the FAA, Inspector Schaper worked for Ameriflight for sixteen years as a line pilot, check pilot, Base Chief Pilot and Embraer 120 Program manager. Inspector Schaper was removed from his position as POI for Atlas, Polar, and Southern Air and involuntarily reassigned to Air Transport International in 2020.

¹⁵³ Cornell Law School, Legal Information Institute, "14 CFR § 121.401 Training Program: General," <https://www.law.cornell.edu/cfr/text/14/121.401>.

¹⁵⁴ Email about Atlas and Polar Air Training Discussion, October 14, 2020, <https://www.commerce.senate.gov/services/files/ED61FC55-4BC8-4244-83B0-40A8D9EC07F0>

¹⁵⁵ U.S. Department of Transportation, Federal Aviation Administration, "Air Transportation Division: Air Carrier Training Systems & Voluntary Safety Programs Branch," last modified November 7, 2017, https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs200/afs280/.

¹⁵⁶ U.S. Department of Transportation, Federal Aviation Administration, "Part 121 AFS-220 Air Carrier Operations Branch," https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs200/afs220/media/functions.pdf.

While serving nearly three years as POI, Inspector Schaper attempted to hold Atlas, Polar, and Southern Air compliant with FAA regulations. While POI, he learned it is unheard of to have one POI permanently assigned to three separate certificated operators. Regulations specify a separate Principle Operations Inspector (POI), Principle Maintenance Inspector (PMI), and Principle Avionics Inspector (PAI) for each certificated operation.¹⁵⁷ As the POI, Inspector Schaper managed the certification and surveillance activities for all three operators, and became aware of the permission granted by a previous POI in 2011 permitting an operations deviation for which he states there is no authority. During Inspector Schaper's tenure as POI, he became aware of this and other deficiencies related to training and certifications. He repeatedly raised his concerns to management, who told him it was approved by Flight Standard's management and was, therefore, valid. Inspector Schaper indicated he believed these deficiencies in training and other non-compliance created significant safety risks. Inspector Schaper asserts there was a lack of management support to ensure operator compliance and that when he pushed back on the operator he was circumvented by his management and told he was not a team player. Inspector Schaper indicated he was told he needed to treat certificate holders as customers and use discretion in compliance actions to help them be "successful." According to Inspector Schaper, the success of an operator is not part of an Inspector's responsibility and should not be a consideration while ensuring aviation safety compliance. He believes this currently is a significant consideration of management in this particular Certificate Management Office (CMO) and understands this to be the case in an increasing number of CMOs in the FAA, due to senior management direction and intervention.

On December 24, 2019, approximately nine months after the Trinity Bay crash and at the final stages of the failing Certificate Holder Evaluation Process (CHEP) inspection discussed above, Inspector Schaper's manager received allegations from the Vice President of Safety and Compliance at Atlas Air Holdings that Inspector Schaper was unprofessional, did not communicate with company team members, and was generally derelict in his oversight duties.¹⁵⁸ Inspector Schaper told Committee staff that in the months following the Trinity Bay Atlas Air fatal crash he was unwilling to budge on compliance requirements at all. As a result, he would not acquiesce to the operator or FAA management pressure to deviate from FAA regulations.

As a result of the Atlas Air complaint, a management inquiry was initiated by Schaper's Atlas CMO Office Manager, who assigned the same FAA Inspector to investigate the matter that was assigned to the whistleblower management inquiry discussed in ASAP – Improper Repairs section of the report. This same investigator recently served on a detail to AAE. Committee investigative staff have reviewed the resulting Report of Investigation (ROI) dated March 17,

¹⁵⁷ U.S. Department of Transportation, Federal Aviation Administration, *Volume 2 Air Operator and Air Agency Certification and Application Process, Chapter 11 Certification of a Title 14 CFR Part 145 Repair Station, Section 4 Evaluate a Part 145 Repair Station Manual and Quality Control Manual or Revision*, order 8900.1 CHG 102 (Washington, DC, 2011), [https://fsims.faa.gov/wdocs/8900.1/change%20history/editorial%20corrections/00_00_editupdate\(fy11-02\).pdf](https://fsims.faa.gov/wdocs/8900.1/change%20history/editorial%20corrections/00_00_editupdate(fy11-02).pdf).

¹⁵⁸ Management Inquiry #20200102001 (March 17, 2020), page 2 through page 39.

2020, for Case#MI20200102001. The investigator pursued the following allegations against Inspector Schaper.

- Does not communicate with company team members.
- When communication is received, it is negative in nature. The example provided explained that a phone call occurred where a request was being made of the POI and his reply was curt, stating that the company could choose between his continuing to review a manual or address the issue at hand, but that he could not do both.
- Work practices were also addressed stating that the POI works a four day work week and that he will not support other communication outside of those four days.
- Has placed certain limitations on what he is willing to do on certain days, stating that he will not do certification work on Mondays, or Fridays.
- Told the Head of the Publications Department that he doesn't work for Atlas Air.
- Informed company personnel that he works Tuesday through Thursday and would not perform duties outside of that time.
- Imposed a restrictive manual submission policy.
- Will not approve manuals until weeks after reviews are completed.
- Blames the company for processing delays that he played a part in.
- Is causing work stoppages and stated that they could provide many examples where letters/manuals/8430s that were submitted on time were delayed by the POI.

Inspector Schaper had been approved for a 4/10 work schedule; however, FAA policy does not permit ASIs to work unapproved overtime, and he had been consistently reminded of the policy. Salaried managers are available for after hours and other operator inquiries and can assign tasks as required. Despite this clear policy, the CMO Office Manager directed the PAI, PMI, and then POI Schaper to provide personal cell phone numbers to the operators and to answer inquiries at any time. This directive was contradictory and in direct violation of FAA policy regarding use of personal communications devices for official business.¹⁵⁹ The management inquiry did not include an interview of a single one of Inspector Schaper's co-workers or any other FAA employees. The investigator's interviews were limited to four senior officials of Atlas Air. This lack of objectivity and balance in the conduct of the inquiry is concerning from the perspective of utilization of best investigative practices, professional conduct, and it may suggest bias. The Committee's investigation found management inquiries such as this often lack of any review or oversight outside of the line of business. Equally concerning is that the investigator asserts in the beginning of his report that "this investigation was accomplished by [REDACTED], Assistant Manager, Atlanta CMO, AFC-500, in accordance with FAA Order 1110.125B."¹⁶⁰

¹⁵⁹ U.S. Department of Transportation, Federal Aviation Administration, National Policy, *Cellular/Satellite Device Acquisition and Management*, order 1830.9A (Washington, DC, 2009), <https://www.faa.gov/documentLibrary/media/Order/1830.9A.pdf>.

¹⁶⁰ U.S. Department of Transportation, Federal Aviation Administration, "1110.125B – Federal Aviation Administration (FAA) Accountability Board, Document Information" (order 1110.125B issued October 26, 2018), https://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.information/documentID/1034808.

*This Order defines the scope of the [Federal Aviation Administration] Accountability Board (AB) to include allegations or incidents of verbal, written, graphic, or physical harassment and other misconduct that creates, or may reasonably be expected to create, an intimidating, hostile, or offensive work environment based on age, color, disability, gender, national origin, race, religion, genetic information, sexual orientation, sexual misconduct, reprisal, and management's failure to report. This Order also prescribes procedures for reporting, investigating, processing such allegations, and analyzing AB data to identify trends to support Agency leadership in addressing allegations of harassment.*¹⁶¹

The conduct alleged against Inspector Schaper had nothing to do with the parameters and authority of the accountability board as described in this order. It is unclear why such an authority would be cited when it is clearly not applicable to these allegations or investigation.

On April 10, 2020, Inspector Schaper received a letter of reprimand stating that his conduct toward Atlas Air team members was inappropriate. That same day, he was involuntarily reassigned to be the POI for Air Transport International. The reassignment memo he received referenced the fact that,

Senior Leadership at Atlas Air have alleged they no longer trust you to objectively conduct regulatory oversight of their company. Inspectors must be sensitive to any conflict, which are actual or perceived that could disrupt the effectiveness or credibility of the Flight Standards Service mission.

The events preceding this management inquiry, and its conduct and findings, strongly suggest FAA CMO management focus on the happiness and success of the operator vs. the veracity of oversight conducted by the FAA. Inspector Schaper has filed a complaint with the Office of Special Counsel (OSC) which was accepted, and is an ongoing investigation.

Most recently an Atlas Air 747-400 flying for DHL experienced a hard landing at Incheon International Airport in Seoul, South Korea, on August 5, 2020. No one was injured. According to whistleblowers with direct knowledge of the incident, three of the plane's four engines made contact with the runway. According to whistleblowers and pilots queried by Committee staff, the severity of an impact with which an inboard engine on a 747 contacts the ground is alarming. Media reporting on the incident includes statements from an Atlas spokesperson citing adverse weather as the cause. While weather and specifically wind was likely a factor, whistleblowers contend the wind conditions as understood were not alarming especially for a 747, and suggest pilot error due to a lack of training and proficiency might also be a factor.

¹⁶¹ *Ibid.*

These events are representative of a disturbingly large number of whistleblower disclosures to the Committee of complaints made by regulated entities against the very inspectors charged with their oversight. Often, these complaints come soon after an inspector proposes a compliance or enforcement action against the regulated entity. The Committee has serious concerns regarding the professionalism and veracity of management inquiries, which as currently implemented allows them to be used as an instrument of retaliation by management without any objective review or oversight.

The fact that two management inquiries into two separate unrelated whistleblower cases utilized the same detailed Inspector and suspect investigative methods is of concern. More concerning is what the Committee has revealed in regard to the Office Manager for the Atlas Air CMO. In 2008, the same manager provided testimony to the House Committee on Transportation and Infrastructure regarding safety concerns about Southwest Airlines and whistleblower retaliation in the FAA.¹⁶² A few years later, he/she took a position with the Office of Audit and Evaluation, the very office charged with whistleblower investigations in the 2012 FAA Modernization and Reform Act. According to documents reviewed by the Committee and testimony by witnesses and whistleblowers, the manager used the knowledge gained during his time in AAE to retaliate against the very employees he was responsible for protecting. This conduct was memorialized by a colleague in March and April of 2014.¹⁶³ The manager was quickly reassigned out of AAE. A management inquiry was directed and conducted by the same office, to which the manager was reassigned, and according to whistleblowers he was receiving direction to retaliate from that very office. It is unknown if the manager was held accountable for his alleged misconduct.

Finding: Senior managers in FAA Flight Standards may lack technical knowledge and experience to effectively lead aviation safety regulatory oversight programs.

D. Allegations of Misconduct at the Honolulu Flight Standards District Office

In June 2019, Committee investigators received information from a whistleblower alleging misconduct by FAA managers at the Flight Standards District Office (FSDO) in Honolulu, Hawai'i. This initial whistleblower, an FAA employee, alleged that FAA managers too frequently overrode the recommendations of inspectors, hampering the ability of inspectors to conduct effective oversight. The whistleblower also alleged that at least one manager issued improper check ride certifications. The whistleblower indicated that this knowledge was indirect

¹⁶² U.S. Congress, House of Representatives, Committee on Transportation and Infrastructure, *Critical Lapses in Federal Aviation Administration Safety Oversight of Airlines: Abuses of Regulatory "Partnership Programs": Hearing Before the Committee on Transportation and Infrastructure*, 110th Cong. 2d sess., April 3, 2008 (testimony of Douglas Peters, Aviation Safety Inspector, Federal Aviation Administration, and Boeing 757 Partial Program Manager, American Airlines Certification Unit, AMR CMO, see p. 20), <https://www.govinfo.gov/content/pkg/CHRG-110hhrg41821/pdf/CHRG-110hhrg41821.pdf>.

¹⁶³ Memorandum for Record, March 14, 2014, April 18, 2014, <https://www.commerce.senate.gov/services/files/621F43CC-9CFE-45AE-BA35-CD5EF9A60FC4>

but well known by local employees and representatives of the Professional Airway System Specialist (PASS) union.

On July 31, 2019, Chairman Wicker sent a letter to then Acting FAA Administrator Elwell requesting documents that included information specific to allegations of misconduct in Hawai'i.¹⁶⁴ On September 5, 2019, Committee staff provided the FAA a prioritized request for certain items included in the July letter. This prioritized request again included information regarding a specific aviation company in Hawai'i. The Committee has requested documents related to whistleblower allegations of whistleblower retaliation and misconduct at the Honolulu FSDO on July 31, September 5, and December 18, 2019, and has yet to receive many of the specific documents requested.¹⁶⁵

A second FAA employee whistleblower contacted the Committee in December 2019, with allegations of misconduct at the same FAA office. The whistleblower, Joseph Monfort, expressly agreed to be publicly identified. Mr. Monfort provided several protected disclosures to the Committee and filed a whistleblower retaliation complaint with the Office of Special Counsel. Mr. Monfort served twenty years in the United States Army and retired as a warrant officer helicopter pilot. In 2009, he began his career with the FAA, and works as a principal operations inspector in Hawai'i.

Novictor Helicopters

Mr. Monfort alleges that some managers in the Hawai'i FAA office have an inappropriately close relationship with Novictor Aviation, a helicopter tour operator in Hawai'i. According to Mr. Monfort, these FAA managers have granted multiple policy deviations for Novictor. The Committee notes that three Novictor crashes have occurred in the last two years, one of which resulted in three deaths.¹⁶⁶

Operation of small non-commercial aircraft, excluding on-demand charter flights or air tours, is governed by Part 91 of title 14 of the Code of Federal Regulations (CFR). Part 91 is generally less restrictive when it comes to safety requirements. Certain exceptions for some commercial operators allow them to operate under Part 91 instead of the more stringent safety standards found in Part 135, which generally applies to on-demand charter flights and air tours. The NTSB has a long history of concerns about the safety of Part 91 air tour operations and has

¹⁶⁴ Letter from Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, to Daniel Elwell, Acting Administrator, Federal Aviation Administration, July 31, 2019, <https://www.commerce.senate.gov/services/files/A22129F6-E00F-4D4D-B22A-65DAF61B2227>.

¹⁶⁵ U.S. Senate Committee on Commerce, Science, and Transportation, "Fact Sheets: Update to Whistleblower Allegations of Misconduct at the FAA Flight Standards District Office in Honolulu, Hawai'i," June 17, 2020, <https://www.commerce.senate.gov/2020/6/update-to-whistleblower-allegations-of-misconduct-at-the-faa-flight-standards-district-office-in-honolulu-hawai-i>.

¹⁶⁶ Mark Huber, "Hawaii Helitour Operator Suffers another Crash," *AIN Online*, May 1, 2019, <https://www.ainonline.com/aviation-news/general-aviation/2019-05-01/hawaii-helitour-operator-suffers-another-crash>.

recently recommended eliminating the exemption that allows certain air tours to operate under Part 91.¹⁶⁷

On November 2, 2018, local FAA management revoked Novictor Helicopter's Letter of Authorization to operate under FAA Regulation Part 91, citing the company's accident history and lack of verifiable safety measures, according to Mr. Monfort. As a result, Novictor was required to operate under Part 135. On November 20, 2018, Mr. Monfort's Front Line Manager (FLM) at the FAA, Darett Kanayama, granted check airman authority to the owner and operator of Novictor, Nicole Vandelaar. In 2017, Ms. Vandelaar had been prohibited from receiving Part 135 check airman authority by the Manager of the Regional Flight Standards Division. Mr. Monfort alleges this prohibition was due to a lack of qualifications, including the 14 CFR Part 119.71 requirement that Directors of Operations have three years of managerial experience within the last six years.¹⁶⁸

As a principal operations inspector, Mr. Monfort was assigned to conduct oversight of Novictor Helicopters. On April 29, 2019, a tour helicopter operated by Novictor crashed on a residential street in Kailua, on the island of O'ahu, killing all three aboard.¹⁶⁹ Mr. Monfort began an investigation into the crash, which revealed that Ms. Vandelaar had improperly received her check airman certification from Mr. Kanayama. According to Mr. Monfort, Ms. Vandelaar was improperly certified to administer check rides on behalf of the FAA, but subsequently gave a check ride to the pilot involved in the April 29th crash ten days before the accident. Mr. Monfort proceeded to revoke Ms. Vandelaar's check airman authorization by letter on May 3, 2019. Later that day, Mr. Monfort was removed from the investigation by his Assistant Manager, Michael Heenan. Mr. Monfort's workload was cited as the reason for his removal. Documents reviewed by Committee staff corroborate these claims by Mr. Monfort.

In a previous incident involving Novictor, Mr. Monfort became aware that a Novictor helicopter had made an emergency landing near Wahiawa, Hawai'i, on September 18, 2018, damaging the aircraft. According to Mr. Monfort, Novictor did not notify the local FAA office, which it was required to do under normal procedure. FAA inspectors only learned of the event when an inspector happened to see the damaged helicopter being transported near the local FAA office with the tail number taped over. A subsequent investigation into the emergency landing found that the accident occurred due to poor maintenance practices and pilot error. The staff who entered these findings into the FAA database that tracks these incidents left the pilot and operator fields blank. According to Mr. Monfort, this is highly unusual and appeared to have been done

¹⁶⁷ National Transportation Safety Board, *Inadvertent Activation of the Fuel Shutoff Lever and Subsequent Ditching Liberty Helicopters Inc., Operating a FlyNYON Doors-Off Flight Airbus Helicopters AS350 B2, N350LH, New York, New York, March 11, 2018*, NTSB/AAR-19/04 (Washington, DC, 2019), <https://www.nts.gov/investigations/AccidentReports/Reports/AAR1904.pdf>.

¹⁶⁸ Cornell Law School, Legal Information Institute, "14 CFR 119.71 – Management Personnel: Qualifications for Operations Conducted under Part 135 of this Chapter," <https://www.law.cornell.edu/cfr/text/14/119.71>.

¹⁶⁹ KITV 4 Island News, "Update: NTSB Releases Preliminary Report on Deadly Helicopter Crash in Kailua," May 9, 2019, <https://www.kitv.com/story/40385953/update-three-dead-after-tour-helicopter-crashes-in-kailua-neighborhood>.

to obscure attribution of the incident to the pilot and Novictor. As a result, a search of the FAA's internal accident database for "Novictor" or the pilot's name does not reveal this incident. Mr. Monfort alleges that this discrepancy in the FAA incident report is evidence of an effort by Novictor and/or FAA employees to divert attribution of this incident away from Novictor.

Safari Aviation

Mr. Monfort was also assigned to conduct oversight of Safari Aviation, Inc., a helicopter tour operator located on the island of Kaua'i. In September and November 2019, Mr. Monfort requested two travel authorizations to proceed to Kaua'i to inspect Safari Aviation. Both requests were denied by FAA managers, making it almost impossible for Mr. Monfort to perform adequate FAA oversight. On December 26, 2019, a Safari Aviation tour helicopter crashed, killing seven.¹⁷⁰ In 2016, Mr. Monfort had initiated a review of Safari's training program due to deficiencies he noted in a check ride with the pilot involved in the December 26, 2019, crash.

During these episodes, Mr. Monfort repeatedly appealed to his office's senior managers to have his direct manager's decisions overturned. Mr. Monfort alleges that as a result, he received two separate suspensions that amount to whistleblower retaliation. Mr. Monfort has filed a whistleblower retaliation complaint with the Office of Special Counsel.

On December 18, 2019, after not receiving any documents in response to previous requests about FAA aviation safety in Hawai'i, Committee staff submitted an inquiry to counsel for the U.S. Department of Transportation (DOT) about the production status of the documents prioritized on September 5, 2019. The agency indicated the request was in process. Committee staff emphasized the importance of the specific Hawai'i request and further focused the request by providing an FAA enforcement file number that had been provided by Mr. Monfort. Eight days later, while Committee staff awaited the production of these documents, the December 26th Safari Aviation crash occurred, killing seven.

On January 17, 2020, Committee staff received a tranche of documents in response to the previous and prioritized requests. Of the 157 pages received, only five were substantively related to the prioritized topic of Hawai'i. These five pages identified several relevant attachments that were not provided to the Committee. This document production did not provide all documents related to the specific FAA enforcement case file requested on December 18, 2019.

On January 22, 2020, Committee staff learned that an FAA Special Agent re-interviewed Mr. Monfort regarding a previously investigated matter from 2018 in which he alleged deficiencies in a Part 135 operator's training program. Additionally, Mr. Monfort was notified that he would be interviewed by FAA and DOT attorneys in February 2020, regarding a fatal helicopter accident he investigated in October 2017. Mr. Monfort reports increasing pressure by his FAA managers to revise findings of his Novictor investigations.

¹⁷⁰ Caleb Jones, "Police: All 7 Killed in Hawaii Tour Helicopter Crash," *AP News*, December 29, 2019, <https://apnews.com/b15500d19b19291a42cba21b6dee65f7>

As a result of the Committee's thorough investigation and review of available documents, on January 24, 2020, Chairman Wicker requested that the Inspector General for the Department of Transportation conduct a thorough investigation into these allegations of regulatory violations and whistleblower retaliation.¹⁷¹

Parachute Jump Plane

Since releasing its first fact sheet, the Committee continued to receive concerning information from FAA whistleblowers regarding the Honolulu FSDO.¹⁷² On June 21, 2019, an aircraft serving as a parachute jump plane crashed shortly after taking off from Dillingham Airport, Mōkūlē'ia, Hawai'i, killing eleven. The Committee has reviewed documentation citing a mechanic's failure to perform the manufacturer's recommended maintenance as a possible contributing factor to a loss of control immediately after takeoff. At the time, an FAA inspector recommended an emergency revocation of the mechanic's FAA certificate. This recommendation was submitted in November 2019.

On February 22, 2020, a second aircraft experienced a loss of control immediately after taking off from Dillingham Airport, crashing and killing two.¹⁷³ According to information provided by whistleblowers, an initial inspection revealed that vital cables had broken and exhibited excessive and abnormal wear. Maintenance records revealed a "100-hour inspection" was last performed on September 19, 2019, by the same mechanic associated with the accident that occurred on June 21, 2019. Although the mechanic certified "checking all cables and control pulleys as required," FAA whistleblowers contend that the mechanic could not have reasonably failed to notice the level of wear and tear of the vital cables. They also contend that the wear could not have occurred in the timeframe between the last maintenance and the crash. On February 24, 2020, two days after the second fatal crash, and approximately three months after the FAA inspector recommended the emergency revocation, the FAA issued the mechanic a letter of re-certification, rather than revocation, allowing the mechanic to retain his/her FAA mechanic's certification. FAA whistleblowers allege this is an example of FAA management's unwillingness to listen to inspectors and support requested enforcement actions.

On February 20, 2020, FAA whistleblowers expressed concern to the Committee that the Honolulu FSDO had undertaken a major "file clean-up project" in January that may have intentionally or inadvertently destroyed documents vital to DOT OIG's investigation into allegations in the Committee's first fact sheet. The Committee has confirmed that the document

¹⁷¹ Letter from Roger F. Wicker, Chairman, United States Senate Committee on Commerce, Science, and Transportation, January 24, 2020, <https://www.commerce.senate.gov/services/files/340B367E-62E4-4D92-AA30-5C422F29A60C>

¹⁷² U.S. Senate Committee on Commerce, Science, and Transportation, "Fact Sheet: The Committee's Investigation Regarding Aviation Safety," October 24, 2019, <https://www.commerce.senate.gov/2019/10/fact-sheet-Committee-investigation-aviation-safety>.

¹⁷³ Hollie Silverman and Ralph Ellis, "2 People Killed When a Single-Engine Airplane Crashes in Hawaii, CNN, February 22, 2020, <https://www.cnn.com/2020/02/22/us/hawaii-plane-crash-trnd/index.html>.

clean-up project occurred, but does not know whether it was in any way connected to the OIG investigation.

Although the information received by the Committee about these accidents is concerning, the Committee does not conduct aviation accident investigations or determine cause. The Committee's oversight investigation has focused on whether the FAA is properly enforcing regulations and thereby ensuring the safest aviation system possible. Dozens of FAA whistleblowers contend that it is not. The National Transportation Safety Board (NTSB) is responsible for conducting accident investigations and determining cause. Both of these accidents remain under investigation by the NTSB.¹⁷⁴

Since the Committee published its fact sheet on this topic on January 31, 2020, it has corresponded with six members of the Hawai'i helicopter tour community. These individuals, including helicopter tour company employees and former Novictor Aviation Pilots, contacted Committee investigative staff in support of Inspector Monfort's assertions, uniformly stating their opinions that Mr. Monfort is a strict but fair safety inspector, and that the local helicopter tour community has long held concerns about Novictor Aviation's operations.

Mr. Monfort alleges that retaliation for his whistleblowing has continued since the Committee published its first fact sheet. He submitted this information to the Office of Special Counsel. Mr. Monfort's attorney advised the Committee that changes to previously approved accommodations stemming from Mr. Monfort's disabled veteran status constitute reprisal for Mr. Monfort's whistleblowing.

On March 11, 2020, Chairman Wicker sent FAA Administrator Dickson a letter making him aware of these allegations and asking that he personally ensure that Mr. Monfort was treated fairly and appropriately. That day, Chairman Wicker also sent Administrator Dickson a letter requesting a number of documents related to the above allegations.¹⁷⁵ To date, the Committee has not received a substantive response to this request.

Most recently, in August 2020 the Committee received additional information related to the June 21, 2019, crash that killed eleven in Hawai'i. Documentation reviewed by Committee investigators outlined a complaint filed by a whistleblower following the fatal crash. The complaint describes an incident in 2016 involving the plane in question, the damage it sustained, and the failure of the local FAA office to revoke the plane's airworthiness certificate. According to the complaint, the plane suffered a large amount of damage while going up in flames, which was understood to be non-repairable.¹⁷⁶ Local FAA officials received warnings about the plane's status and were encouraged to revoke its airworthiness certificate, but did not do so, believing the owner would not attempt to repair the plane. The complaint further states the

¹⁷⁴ National Transportation Safety Board, "The Investigation Process," <https://www.nts.gov/investigations/process/Pages/default.aspx>.

¹⁷⁵ Letter from Roger F. Wicker, Chairman, U.S. Senate Committee on Commerce, Science, and Transportation, to Stephen Dickson, Administrator, Federal Aviation Administration, March 11, 2020, <https://www.commerce.senate.gov/services/files/32347991-3947-4EB7-A097-840E198D48DD>.

¹⁷⁶ Hawaii News Now, "11 Killed in One of Hawai'i's Worst Civilian Aviation Disasters," June 21, 2019, <https://www.hawaiinewsnow.com/2019/06/22/authorities-responding-reports-possible-plane-crash-north-shore/>.

owner repaired the plane, and flew it to a different FAA jurisdiction, resulting in no follow up oversight.

Initial review of documentation obtained by the Committee indicates that the Flight Standards office investigated this complaint. Committee investigators are unaware if the complaint underwent any criminal or other review by the Department of Transportation Office of Inspector General (DOT OIG) prior to the FAA's internal investigation. The Committee has requested relevant reports of investigation related to this complaint and will engage the FAA and DOT OIG further.

On October 28, 2020 the NTSB opened a public docket containing factual information collected in support of its investigation into the crash of N256TA.¹⁷⁷ The evidence revealed in this docket appears to confirm concerns of a previous whistleblower about the adequacy of the repairs completed on the airplane following an inflight loss of the right hand horizontal stabilizer in 2016. The "Maintenance Record Factual Report" section of the docket includes eight-eight pages of information. The report reveals that parts had been installed the plane that were not approved replacements.¹⁷⁸ The Committee's review of the documents prompt serious questions regarding maintenance of the airplane while it was operated in Hawaii. The docket also revealed the plane required "full aileron trim and some rudder trim in order to fly straight and level". According to pilots including FAA Inspectors such a setting is indicative of a larger problem and should have been investigated and corrected. The cause of the crash remains unknown and the NTSB is expected to release a final report in 2021.

DOT OIG Audit on FAA Criminal Referrals

In August 2018, a DOT OIG audit found that DOT's criminal referral policies were not up to date and lacked central availability. A survey utilized as part of this effort revealed a need for additional training.¹⁷⁹ Another DOT OIG audit report, from November 1998 examined hotline referrals and the FAA Administrator's Hotline. The audit concluded in part that,

*FAA's process for disposing of referrals from the OIG and FAA Administrator's Hotline needs improvement to ensure that allegations of fraud, waste, or abuse are thoroughly and objectively reviewed and that corrective actions are taken when warranted.*¹⁸⁰

In the deficiencies found by the IG audit, the IG concluded in part,

¹⁷⁷ *Aviation Investigation, 40 docket items, October 28, 2020, FAA Modernization and Reform Act of 2012, (Feb. 14, 2012) available at: <https://www.congress.gov/112/plaws/publ95/PLAW-112publ95.pdf>*

¹⁷⁸ *Ibid.*

¹⁷⁹ U.S. Department of Transportation, Office of Inspector General, *DOT Operating Administrations Can Better Enable Referral of Potentially Criminal Activity to OIG*, ST2018076 (Washington, DC, 2018), <https://www.oig.dot.gov/sites/default/files/DOT%20Criminal%20Referrals%20Final%20Report%5E08-22-18.pdf>.

¹⁸⁰ U.S. Department of Transportation, Office of the Secretary of Transportation, Office of Inspector General, *Hotline Referrals*, MA-1999-017 (Washington, DC, 1998), <https://www.oig.dot.gov/sites/default/files/ma1999017.pdf>.

These deficiencies occurred primarily because FAA assigned these hotline referrals to an office or individual that was not in a position to render an independent review, including three referrals assigned to the subject of the allegation or the subject's immediate supervisor.

Despite the findings of these audits and the adoption of recommendations, the Committee's investigation has discovered numerous examples of the same deficiencies. In fact, it is common practice, as in the Hawai'i example, for Office of Audit and Evaluation (AAE) to routinely refer hotline complaints to FAA lines of business for investigation rather than conduct an independent objective investigation of its own. This practice appears to perpetuate deficiencies identified in 1998 and reaffirmed in 2018.

Finding: FAA improperly allowed a Part 135 Helicopter company in Hawai'i to operate under Part 91.

Finding: FAA improperly granted check airman authority under Part 135 to the owner/operator of Novictor Helicopter in violation of 14 CFR Part 119.71

Finding: FAA Management is reluctant in many cases to listen to inspectors and support requested compliance and enforcement actions.

E. Improper Training and Certification

On March 28, 2019, the Committee corresponded with two FAA Aviation Safety Inspectors (ASI) from the Long Beach, California, Aircraft Evaluation Group (AEG) office. These ASIs disclosed concerns that members of the Flight Standardization Boards (FSB) formed in both Long Beach and Seattle for the Gulfstream VII and Boeing 737 MAX, respectively, had not completed the required training for job tasks such as issuing type ratings and conducting check rides. These whistleblowers stated that many ASIs had not completed FAA course number 21000138: "Principles of Evaluation for Operations ASIs," which serves as foundational training for all ASI.

One of the whistleblowers described above is ASI James T. Wrigley. Inspector Wrigley has been in the FAA over six years as an ASI. Prior to this position in the FAA Inspector Wrigley worked for several other Part 121, 91, 91K and 135 aviation companies as Director of Operations, Chief Pilot, and Check Pilot. Inspector Wrigley holds a Master's degree in Aviation Safety and a degree in Human Services Technology and Occupational Education. He taught graduate level courses in aviation safety management systems and related subjects for three years. Inspector Wrigley has over 8,000 combined flight hours and eleven jet type ratings. Inspector Wrigley and other whistleblowers have shared several concerns with Committee investigators about training, certifications, management misconduct, and retaliation.

According to the FAA training catalog, FAA course number 21000138 provides "the judgment and basic experience to GAOP ASIs in conducting pilot evaluations, while emphasizing job functions. It will teach (ASI) how to conduct evaluations, prepare/develop a plan of action, what is involved in practical test standards, (and) how to conduct an Airman

Certification event.”¹⁸¹ Additionally, Inspector Wrigley and other whistleblowers specified that the Chairman of the FSB did not have the experience and training necessary for his position. Whistleblowers disclosed to the Committee that the Chairman skipped procedures during a number of “check rides,” flights given to certify pilots in a new aircraft, and often admitted to not knowing the proper procedures or having the proper training. Whistleblowers also stated that the Chairman had recently served as chair of another FSB for the Mitsubishi Regional Jet, and that many of the issues identified were most likely occurring on that and other FSBs.

These same whistleblowers also alleged to the Committee that during the certification of the Boeing 787 aircraft, an unapproved and insufficient replacement for a flight simulator was used, called the “Iron Bird.” This machine, instead of approved flight simulators, was used to conduct check rides and issue new type ratings. One whistleblower learned this information from their now-retired supervisor, who went on to state to the whistleblower that the inappropriate use of the Iron Bird was a well-known open secret in the FAA AEG. A review of documents and staff interviews conducted to date have been unable to substantiate this allegation. Remaining staff interviews and document productions may inform findings on this topic.

Finally, the whistleblowers alleged that multiple FAA employees who were not members of the Gulfstream VII FSB received check rides and were issued type ratings without taking the prerequisite training, and in some cases filled out the check ride paperwork without having completed the ride itself. Despite not completing required training or completing a check ride, these ASIs received a coveted type rating for this aircraft. These concerns had been disclosed to FAA management in August 2018, and one whistleblower was repeatedly told to “be quiet” by his FAA manager. This whistleblower also alleged that they were retaliated against by their FAA manager, in the form of removal from work assignments and denial of training, for raising these concerns. The whistleblower elevated his concerns to the DOT OIG in October 2018. DOT OIG referred the complaint to FAA AAE as well as FAA’s Office of Security and Hazardous Materials (ASH) in November 2018. The AAE investigation substantiated Mr. Wrigley’s claims.

The AAE investigation opened as a result of these disclosures exhibited some irregularities. According to Mr. Wrigley, a senior investigator on the team investigating the disclosures called him to inform him that the FAA wanted to release his name and that they would be “OK” as long as they did not link the Boeing 737 MAX FSB to the disclosures. Inspector Wrigley took this as a threat but refused to limit his allegations.

Additionally, according to Inspector Wrigley, when an Office of Special Counsel (OSC) investigator requested records of his interview performed by an AAE investigator, OSC was informed that all audio and video had been lost and that no notes had been taken. Inspector Wrigley and other FAA employees interviewed by the same AAE investigator stated the investigator took written notes in each of the respective interviews. Chairman Wicker asked for these materials on July 31, 2019, and has yet to receive any response to this specific request.

¹⁸¹ Federal Aviation Administration, “Model Flight Standards Inspector Training,” last modified September 13, 2017, <https://www.faa.gov/about/initiatives/iasa/mcad/>.

Subsequent Committee review of AAE investigative products and methods raises serious concerns regarding the use of best investigative practices.

A third whistleblower, who substantiated the allegations of improper training, alleged that multiple colleagues had warned them not to speak with Congress. This whistleblower stated that it is understood by most employees within their office that speaking to Congress is likely to result in harsh retaliation by managers. This whistleblower was also interviewed by AAE and alleged that in addition to recording audio on an iPhone, the investigator took notes during the meeting. The whistleblower was subsequently removed from the GVII FSB, allegedly as a result of speaking to Congress and AAE investigators. The Committee has not received any of these investigative materials as requested by Chairman Wicker. A fourth whistleblower contacted the Committee and corroborated the whistleblower retaliation claims made by others.

On October 28, 2019, Department of Transportation Office of General Counsel (DOT OGC) provided the ninth tranche of documents related to the Committee's document request. Among the documents provided was an August 30, 2018, email from the FAA manager found by AAE to have retaliated against a whistleblower for raising concerns regarding ASI training, to the FAA Inspector/Chair of the Gulfstream VII FSB. In this email, the office manager admits that many AEG operations inspectors had not received the necessary training to give certification checks as members of the FSB.¹⁸² He states:

In researching the issue (of) pilot certification training brought up by (REDACTED), I have been surprised to find that many AEG OPS inspectors never received this training, at least to the extent that the GA (general aviation) folks have. The issue is apparently widespread and does not only include our office but all AEG offices. In my view the discovery of this training lapse is a good thing that is fully correctable.

Consider this, from 1985 to 2005, the only folks eligible to become AEG Operations Inspectors (for transport aircraft) were from the air carrier side of the house. I suspect that none of them had formal training on conducting full certification checks in airplanes, yet many checks were given over the years. Impact to safety? In my opinion, little to none.

The office manager was an experienced inspector and manager at the FAA. His view that there exists a "training lapse" within AEG contradicts statements made by FAA officials, including those of then Acting Administrator Elwell in his May 2, 2019, letter to Chairman Wicker. Additionally, this communication shows that as far back as August 2018, before whistleblowers elevated their concerns to DOT OIG, managers in the FAA Long Beach AEG office were aware of these training deficiencies. Furthermore, the email goes on to explain that the Chair of the Gulfstream VII FSB was missing the training as well:

¹⁸² Email regarding *OTJ Tracking and FSB Checks*, August 30, 2018, <https://www.commerce.senate.gov/services/files/5435127C-D02A-4B79-AB32-86F86F11F970>

Unfortunately, your OJT (on the job training) records only show completion of Level 1 for Conducting Pilot Type Rating Practical Tests. (...) The thing is there are no JTA or OJT tasks at Level 2 or Level 3 that are found in the OJT program for Ops Inspectors. Essentially no new AEG Ops inspector has an OJT task to train for or evaluate expertise in pilot certification activities. Go figure. I consider this whole situation to be a bump in the road. I do, however, anticipate a course requirement in the near future for all AEG inspectors who need pilot certification training.

Statements made by numerous FAA managers interviewed by the Committee contradict the statement above. One manager told the Committee everyone had completed OJT prior to conducting type rating check rides and that current records reflected this. Two whistleblowers allege an effort by Flight Standards management to “update” records to hide the training deficiencies. The Committee has not been able to substantiate this allegation.

It is not immediately clear why the office manager went on to tell Inspector Wrigley to keep quiet about his concerns regarding insufficient training, or why the office manager chose not to elevate his findings in order to begin the necessary organizational corrective action. The office manager retired from the FAA in January 2019, and was not made available to the Committee for an interview prior to his departure.

Another concern brought forth by Inspector Wrigley was the deficiency in the training and checking done by the FSB Chairman as a result of the lack of training and/or OJT. Inspector Wrigley claimed a maneuver which requires an engine shut down during a check-ride was not performed during his own check ride and that of at least one other FAA ASI. Documentation reviewed by the Committee and an interview with the other Inspector confirmed this assertion. The Committee has learned other ASIs have also skipped this procedure, including while working on other FSBs. Another Long Beach AEG ASI confirmed this omission has been supported by management, saying it really is not necessary and has been deemed unsafe by their current AEG Long Beach management. Regardless, it is a requirement that is being blatantly ignored. According to Inspector Wrigley, at least one senior official in FAA Flight Standards shared his concern about the validity of thousands of pilot certifications completed by unqualified inspectors. The official shared concerns about whether an extensive audit should be done and rechecks known as 709s is required.

The Administrator of the Federal Aviation Administration may re-inspect at any time a civil aircraft, aircraft engine, propeller, appliance, design organization, production certificate holder, air navigation facility, or air agency, or reexamine an airman holding a certificate issued under section 44703 of this title.¹⁸³

¹⁸³ Cornell Law School, Legal Information Institute, “49 U.S. Code § 44709 – Amendments, Modifications, Suspensions, and Revocations of Certificates,” <https://www.law.cornell.edu/uscode/text/49/44709>.

A “709” check ride is considered a re-examination of a pilot’s certification¹⁸⁴; this would be needed if a pilot was involved in an incident that questioned his/her ability to complete the qualifications of his/her job.¹⁸⁵

Staff interviews related to the Gulfstream FSB and related training allegations revealed a lack of knowledge among senior managers. Many did not know what several of the requirements were for conducting an FSB or performing check rides. One senior manager had no FAA operational oversight experience at all before being detailed without competition from an administrative position to an operational role. Another senior AEG manager who has significant responsibility for FAA FSB disclosed he/she had no prior FSB experience before joining the AEG as a manager. They were unable to answer basic questions about FSB requirements. More concerning he/she was also unable to answer procedural questions about the conduct of check rides. Despite the findings of AAE and OSC, this AEG manager asserted nobody had done anything wrong.

The FAA Office of Audit and Evaluation, the Office of Special Counsel, and the Committee’s investigation all concluded that many Aviation Safety Inspectors in the FAA Aircraft Evaluation Group lacked required training and credentials to conduct some of the jobs they were tasked. AAE determined approximately 76 percent of AEG ASI lacked the required training. Henry Kerner, Special Counsel, concluded that, “[t]he FAA’s failure to ensure safety inspector competency for these aircraft puts the flying public at risk.” The importance of these investigative findings reach beyond high profile commercial airlines tragedies, including the 737-MAX.

The examples described above regarding improperly trained and unqualified check airmen is not a new problem in the FAA. A 2017 DOT OIG report found in part, “FAA’s processes are insufficient to ensure that required training and observations for check pilots and APDs are completed or documented prior to approval.” And that “FAA’s oversight is insufficient to ensure that air carriers meet ongoing check pilot requirements.”¹⁸⁶ Despite the OIG findings and FAA adoption of the recommendations, challenges related to FAA internal compliance with check airman qualification requirements persist.

FAA Training

A whistleblower with extensive experience and direct knowledge of the FAA foundational training course number 21000138, “Principles of Evaluation for General Aviation Operations ASIs,” shared serious concerns with the Committee about the gradual reduction in

¹⁸⁴ Rick Durden, “The FAA 709 Checkride: Protecting Yourself,” *The Aviation Consumer*, updated October 29, 2019, <https://www.aviationconsumer.com/safety/the-faa-709-checkride-protecting-yourself/>.

¹⁸⁵ U.S. Department of Transportation, Federal Aviation Administration, *Volume 5 Airman Certification, Chapter 7 Reexamination of an Airman, Section 1 Conduct a Reexamination Test of an Airman Under Title 49 of the United States Code*, order 8900.1 CHG 272 (Washington, DC, 2013), https://fsims.faa.gov/wdocs/8900.1/v05%20airman%20cert/chapter%2007/05_007_001rev1.htm

¹⁸⁶ U.S. Department of Transportation, Office of Inspector General, *FAA Has Not Ensured All Check Pilots Meet Training and Observation Requirements*, AV2017050 (Washington, DC, 2017), <https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Check%20Pilots%20Final%20Report%5E5-31-17.pdf>.

training content and duration in the FAA over the past several years. According to the FAA website, “this course is to provide the judgment and basic experience to GAOP ASIs in conducting pilot evaluations, while emphasizing job functions.”¹⁸⁷ It will teach you how to conduct evaluations, prepare/develop a plan of action, what is involved in practical test standards, how to conduct an Airman Certification event, and have hands on exercises in an FTD to apply these principles.”

This whistleblower, an experienced training manager, indicated that ASIs in all areas were lacking experience and subject matter expertise. The whistleblower indicated that the foundational training course number 21000138 had been reduced from three weeks to five days in length over the past several years. The Committee reviewed documents provided by the whistleblower which support his/her claims.

Another whistleblower contacted the Committee with additional allegations of improper training. This whistleblower was assigned to the FAA Academy and tasked with revising FAA courses concerning the Organization Designation Authorization program, as a result of a DOT OIG finding in 2011.¹⁸⁸ In 2015, the whistleblower filed a complaint with the DOT OIG alleging that safety training courses for FAA employees were deficient and did not meet a recent Congressional mandate. Following what the whistleblower alleges to be a period of harassment by FAA managers, in early December 2015, the whistleblower was notified of an FAA proposal to suspend him/her for five days for “improper conduct and failure to contribute to a hospitable work environment.” The whistleblower and another co-worker who supported the allegations resigned from the agency under duress.

The Committee investigation found that ineffective leadership, training deficiencies and dysfunction are not new in the FAA. A report from AAE Director Clayton Foushee to Administrator Michael P. Huerta in September 2015 detailed findings of an investigation prompted by internal whistleblower contributions, including file numbers IWB14803 and IWB14807.¹⁸⁹ The investigation was originally focused on the FAA Flight Program, which is responsible for FAA flight program safety.¹⁹⁰ The scope of the investigation expanded after accidents occurred in the Flight Standards and Aircraft Certification programs.

According to the report, concerns about FAA flight programs came into focus following a fatal accident of FIS aircraft N82, a Beech Super King Air, in Front Royal, Virginia, killing three people in October 1993. The NTSB made several observations and recommendations as a result of their investigation. Factual observations included nonexistent surveillance of flight activity,

¹⁸⁷ U.S. Department of Transportation, Federal Aviation Administration, “FAA Catalog of Training,” <https://www.academy.jccbi.gov/catalog/CPNT/Details/1290>.

¹⁸⁸ U.S. Department of Transportation, Office of the Secretary of Transportation, Office of Inspector General, *FAA Needs To Strengthen Its Risk Assessment and Oversight Approach for Organization Designation Authorization and Risk-Based Resource Targeting Programs*, AV-2011-136 (Washington, DC, 2011), <https://www.oig.dot.gov/sites/default/files/FAA%20ODA%206-29-11.pdf>.

¹⁸⁹ FAA Flight Program Oversight Noncompliance to FAA Policy and Regulation, *On File with the Committee*

¹⁹⁰ U.S. Department of Transportation, Federal Aviation Administration, “Flight Program Operations,” last modified September 22, 2020, https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/flight_program_operations/.

other oversight efforts intentionally thwarted by management, management provided insufficient oversight of the program, and there were no specialized experience requirements for executives and managers.¹⁹¹

The NTSB made several recommendations which included “require flight operations-related experience of those individuals who manage or oversee flight operations activities.”¹⁹² This recommendation is notable, as over twenty-seven years later dozens of whistleblowers and FAA officials have expressed serious concerns to Committee investigators regarding the qualifications of numerous managers and executives in Flight Standards. An internal FAA investigation related to a 2014 flight program plane crash in Alaska found that FAA employee training requirements were inadequate or deficient.¹⁹³ The same investigation observed a need to evaluate “minimum training requirements prior to conducting certification flight test.”¹⁹⁴ A November 2017 monthly message from former Flight Standard Executive John Duncan appears to be in direct conflict with the NTSB recommendations. It says in part: “In many ways, leadership is about letting go. To be effective, a leader has to consciously let go of several things.” It goes on to say: “First is to let go of the notion that a leader’s job is about technical expertise.”¹⁹⁵

The NTSB report made several observations about the FAA Aircraft Evaluation Group.¹⁹⁶ They include “training requirements have been weakened and now maintain a currency at a lesser standard than the proficiency of the standard needed for job task.” This finding of deficiency appears to be the difference in training that then Acting Administrator Elwell referred to as the justification for AEG ASI to be lesser qualified than other ASI to perform critical job tasks such as those on the 737 MAX. The report goes on to emphasize the omission of AEG from FAA order 4040.9e: “Creates confusion when AEG pilots seek approval for required and concurrent training.” In addition the report found “no evidence of any oversight activities of AEG flight activities” and that “AEG pilots have been unable to maintain currency because required refresher training in specific aircraft types has not been made available.”¹⁹⁷

The various reports and related documentation reviewed by Committee investigative staff detail systemic training deficiencies (specifically evaluation and validation) in training ASIs and engineers, in deficiencies and irregularities in investigative processes to ensure corrective actions and lack of senior executive accountability. These challenges appear to persist today as described elsewhere in this section and other parts of this report.

¹⁹¹ National Transportation Safety Board, *Aircraft Accident Report: Controlled Flight into Terrain, Federal Aviation Administration, Beech Super King Air 300/F, N82, Front Royal, Virginia, October 26, 1993, AAR-94/03*, (Washington, DC, 1994) <http://libraryonline.erau.edu/online-full-text/ntsb/aircraft-accident-reports/AAR94-03.pdf>.

¹⁹² *Ibid.*

¹⁹³ *Ibid.*, 24.

¹⁹⁴ *Ibid.*

¹⁹⁵ *Monthly Message from John Duncan*, November 2017, <https://www.commerce.senate.gov/services/files/C43745A3-E73E-4558-AD70-E67961FD15BA>

¹⁹⁶ National Transportation Safety Board, *Aircraft Accident Report: Controlled Flight into Terrain, Federal Aviation Administration, Beech Super King Air 300/F, N82, Front Royal, Virginia, October 26, 1993, AAR-94/03*, (Washington, DC, 1994) <http://libraryonline.erau.edu/online-full-text/ntsb/aircraft-accident-reports/AAR94-03.pdf>.

¹⁹⁷ *Ibid.*, 26.

In April 2019, a hotline complaint was filed alleging outdated and wasteful training. The complaint even indicates that the instructors teaching the course admitted it was outdated. The nature of the courses is particularly concerning as two of them are related to Designated Agency Representatives (DAR) including management or oversight of DAR. According to the FAA: “A Designated Agency Representative (DAR) is an individual appointed in accordance with 14 CFR §[183.33](#) who may perform examination, inspection, and testing services necessary to the issuance of certificates.”¹⁹⁸ Two types of DARs include manufacturing (DAR-F) and maintenance (DAR-T); DARs are discussed further in the Skyline Airplane subsection of this report. A related program is the Organizational Designated Airworthiness Representative (ODAR). The Organization Designation Authorization (ODA) program is the means by which the FAA grants designee authority to organizations or companies.¹⁹⁹ Boeing Inc., for example, is an ODAR due to its ODA status. Deficiencies in training have been well known by FAA senior managers for the last decade. Foundational training in oversight transcends all areas of aviation safety. As described above, deficiencies in oversight training were acutely understood by the FAA prior to the tragic 737 MAX crashes. These deficiencies persisted a year after the crashes as evidenced by the Hotline complaint alleging deficient ODA training. Effective oversight of the Boeing ODA remains a major focus of 737 MAX scrutiny and investigation.

Most recently, in September 2020 an additional whistleblower came forward to advise Committee investigators that training related to the Safety Assurance System was being conducted in an ineffective and wasteful manner. According to the FAA, “the Safety Assurance System (SAS) is the Federal Aviation Administration’s (FAA) oversight tool to perform certification, surveillance, and continued operational safety. SAS includes policy, processes, and associated software that Flight Standards Service (FS) uses to capture data when conducting oversight.”²⁰⁰ The training is designed to ensure FAA ASI know how to properly conduct and record SAS activity and is based on policy. The whistleblower alleges the current SAS training effort was being rushed to meet an October 2020 deadline. However, approved policy had not been completed, which largely shapes the training. Therefore, the ASIs are being trained according to the current draft policy. The whistleblower contends this practice is wasteful because in his/her over twenty years of FAA experience, this type of draft policy often changes before it is approved. Therefore, if the policy changes in any substantive way, new training would likely be required. Meanwhile, ASIs will be operating based on the training they have received, which may have been informed by policy that is outdated. The whistleblower contends this level of performance and execution in Flight Standards is par for the course. He/she further asserts that the FAA would not allow the approval of an operator’s training for anything based on draft policy.

¹⁹⁸ U.S. Department of Transportation, Federal Aviation Administration, “Manufacturing and Airworthiness Designees,” last modified July 31, 2020,

https://www.faa.gov/other_visit/aviation_industry/designees_delegations/individual_designees/manufacturing/.

¹⁹⁹ U.S. Department of Transportation, Federal Aviation Administration, “Delegated Organizations,” last modified December 14, 2018,

https://www.faa.gov/other_visit/aviation_industry/designees_delegations/delegated_organizations/.

²⁰⁰ U.S. Department of Transportation, “Safety Assurance System (SAS),” last modified October 8, 2019, <https://www.faa.gov/about/initiatives/sas/#:~:text=The%20Safety%20Assurance%20System%20%28SAS%29%20is%20the%20Federal,%28FS%29%20uses%20to%20capture%20data%20when%20conducting%20oversight.>

Interviews

An FSB is responsible for determining requirements for pilot type ratings, development of training objectives, recommendations to use in the approval process of an operators training program, and to ensure initial flight crewmember competency. The FSB also conducts initial training for FAA inspectors and the manufacturer's pilots. An FSB is typically comprised of a chairperson from the FAA Aircraft Evaluation Division, FAA operations inspectors, FAA Office of Safety Standards representatives, and technical advisers from other FAA offices.²⁰¹

The Committee's interviews revealed conflicting information about the Gulfstream VII FSB. Then Acting Administrator Daniel Elwell asserted in a response to one of Chairman Wicker's letters that the FAA immediately stopped all Gulfstream VII FSB activity on July 24, 2018, so it could review all Aircraft Evaluation Group (AEG) ASI training histories. To date, the Committee has not received any documentation supporting this claim. Mr. Wrigley, other whistleblowers, and several employees interviewed by the Committee allege that no such work stoppage ever took place. The employees included ASIs and multiple levels of Flight Standards management. Three different Flight Standards managers answered the question with three different answers. The most senior FAA manager indicated he/she originated the directive, but could not recall if it was verbally, in writing, or both. The most junior manager asked about the work stoppage indicated the stoppage was his/her idea and confirmed it was verbal, but may have also sent an email. The final FAA manager, from the AEG, could not recall if the work stoppage was communicated verbally, in writing, or both.

Committee staff interviewed two FAA employees with direct knowledge of the conduct of the 737 MAX Flight Standardization Board. They were also familiar with allegations made by whistleblowers and concerns raised by the Committee related to the Gulfstream VII FSB. The employees asserted that the 737 MAX FSB was conducted professionally and diligently. They were unaware of any pressure from FAA management to influence the proposed training requirements or general outcome of the FSB and subsequent certification of the 737 MAX aircraft. They acknowledged the existence of Maneuvering Characteristics Augmentation System (MCAS) early in the evaluation and indicated the FSB removed it from consideration at the request of Boeing Chief Technical Pilot Mark Forkner. One of the employees indicated that FSB Chairperson Stacy Klein received technical briefings related to this request. The FAA did not make Ms. Klein available to the Committee for an interview, despite an initial request almost a year ago.

Leadership Qualifications

The Committee found that several FAA managers appear to lack qualifications for the positions they occupy. In one example, an FAA Flight Standards senior manager had no previous FAA inspection or operational oversight experience prior to becoming an operational

²⁰¹ U.S. Department of Transportation, Federal Aviation Administration, "Flight Standardization Board (FSB)," last modified July 9, 2020, https://www.faa.gov/aircraft/air_cert/airworthiness_certification/fsb/.

manager. The employee possessed a general management and human resource management background. The agency handpicked this person to act in an operational management position without competition. This non-competitive promotion provided the requisite experience to further qualify the manager for additional operational oversight positions, and the person was promoted at a rapid pace. During the Committee's interview, the now senior manager was unable to answer direct questions about regulatory requirements and procedure, revealing a lack of basic knowledge of oversight tasks and the role and responsibilities of FAA ASI.

While interviewing another senior manager, the Committee learned of this manager's rapid progression from a position as an ASI in a regional FSDO to an acting management position, followed by the person's current senior management position in Flight Standards. The position has significant responsibility over aircraft evaluation and flight standardization, including Flight Standardization Boards (FSB) used to contribute to the certification of airplanes like the Gulfstream VII and Boeing 737 MAX. However, the senior manager lacked any experience in aircraft certification and had never participated in an FSB. The manager was unable to answer basic technical questions related to these activities for which he/she provides a senior leadership role.

Finding: An FAA ASI was issued a new type rating without having completed the required training.

Finding: Thousands of type rating check rides may have been conducted by improperly certified ASI, potentially rendering them invalid.

Finding: FAA senior managers have not been held accountable for failure to develop and deliver adequate training in Flight Standards despite repeated findings of deficiencies over several decades.

Finding: FAA conduct of investigations appear to be inconsistent, and lack objectivity and diligence, while providing opportunity for abuse and retaliation.

F. Ineffective Safety Oversight of Southwest Airlines

Committee investigators have been contacted by a number of FAA employees charged with the oversight of Southwest Airlines. These whistleblowers, as well as investigations independent of the Committee, have outlined a persistent safety concern related to the airline and ineffective management and leadership in the FAA and at the Certificate Management Office (CMO) responsible for aviation safety oversight of Southwest Airlines. Some of the whistleblowers' safety concerns are outlined below.

Mr. Jeffrey Rees first contacted the Committee in 2019. He is employed as an Aviation Safety Inspector (ASI) at the FAA CMO for Southwest Airlines and has been an ASI in the FAA for ten years. Inspector Rees is a retired U.S. Navy LCDR Aviator with twenty years of service. He has over 7,200 combined flight hours and approximately twenty-five years conducting inspections and oversight. Inspector Rees expressly consented to the release of his name in this report.

Aero Data

In late summer 2017, Southwest Airlines transitioned to a new system for their aircraft preflight performance calculations. These systems receive inputs such as the weight and balance of the aircraft, the weather, the runway length, and available fuel to calculate takeoff performance which pilots rely on for aircraft configuration and required takeoff thrust. This system permits the airline to preset safety buffers that give pilots a defined amount of extra runway as a safety margin in the event of a rejected takeoff.

The new application, facilitated by the company “Aero Data,” is called the “Performance Weight and Balance System” (PWB). PWB’s implementation at Southwest Airlines, according to Inspector Rees, is designed to make full use of the aircraft’s performance in order to save fuel and allow for more cargo on the plane. To accomplish these objections, safety buffers previously incorporated in the calculations were removed. This means that Southwest Airlines flight crews must now perform at a much higher level due to a reduced margin for error.

Inspector Rees cites an incident in which a Southwest Airlines pilot reached out to him claiming that the PWB on their plane had calculated a stopping margin of zero feet in several instances. A margin of zero feet means that if the pilot delayed the decision to reject, or was too slow to execute the reject procedure by a fraction of a second, the zero foot margin would be inadequate and the plane would run off the end of the runway. These are the most concerning of numerous similar instances disclosed by Inspector Rees. Inspector Rees indicated that Southwest Airlines informed the FAA that the new system PWB was an “apples to apples” replacement of the previous system and had no differences in safety considerations. When Inspector Rees raised concerns to his manager, a Supervisory Principal Operations Inspector (POI), he was told that the changes were technically legal. Inspector Rees maintains that these changes are incredibly dangerous. They elevated risk even higher on shorter constrained runways and exacerbated by poor weather conditions. According to Rees, Southwest pilots had been inadequately trained for and prepared for these changes. Rees received concerns about the PWB change from numerous line pilots and check airmen at Southwest Airlines. Inspector Rees stated that some have taken photos of the low or non-existent margins for error and have shared them among the Southwest Airlines pilot community. In a communications’ sent to Inspector Rees, one pilot describing a specific event said: “Safety was compromised due to PWB, as much as I hate to admit that” and “I can tell you without reservation that as a Pilot PWB has been an impairment to me flying a 737 from A to B safely.” Committee staff spoke to multiple SWA pilots who confirmed this issue as reported by Rees and shared their concerns. Pilots feared identifying themselves and being critical of SWA for fear of being fired.

Extended Envelope Training

Extended Envelope Training (EET) is a new industry-wide pilot training requirement mandated by the FAA in 2013, with compliance required by March, 2019.²⁰² This rulemaking was required by the 2010 congressional reauthorization of the FAA as part of the response to the Colgan air crash in 2009.²⁰³ It is the first pilot training involving recovery from full stalls, among other relatively extreme situations. It requires skilled and knowledgeable instructors, and the FAA recommends that an airline select a small group of expert pilots to learn EET and who then teach it to the airline's other pilots.

Inspector Rees alleges that as a part of their first EET implementation in 2017, Southwest Airlines provided insufficient training to its expert pilots. He estimates that approximately 50 percent of Southwest flight crews should have received retraining. FAA guidance was that each expert pilot spend four hours in a training simulator. Inspector Rees alleges that, with the permission of FAA management, Southwest Airlines was permitted to have three expert pilots in each four-hour training simulator, rotating in and out instead of individualized four hour blocks of instruction. Additionally, instead of choosing the "cream of the crop" from its 400 training pilots, Southwest Airlines was permitted to use all 400. These 400 pilots, who may have received insufficient simulator training, then went on to train all pilots at Southwest Airlines. The large number of pilots permitted to conduct this training precluded adequate quality control.

Inspector Rees drafted a letter to Southwest Airlines for his POI to send that outlined his concerns about the training deficiencies.²⁰⁴ His manager characterized the letter as "too direct" and directed another FAA employee to write a "softer letter." Southwest Airlines did not respond to this letter within the required thirty days, and when they did finally respond, they failed to make any recommended changes to the training program. Inspector Rees states that Southwest Airline's 2018 EET implementation was equally deficient as the 2017 implementation.

Performance Weight and Balance

The FAA requires Airlines to carefully track the number and weight of baggage carried on the aircraft, as well as the number and location of passengers in the cabin, in order to have accurate data on the weight and balance of the aircraft.²⁰⁵ Performance Weight and Balance (PWB) data is critical to computations which provide for safe takeoffs and landings. In the case

²⁰² 14 CFR § 121.423.

²⁰³ U.S. Congress, House of Representatives, Committee on Transportation and Infrastructure, *The Federal Aviation Administration's Call to Action on Airline Safety and Pilot Training: Hearing Before the Subcommittee on Aviation of the Committee on Transportation and Infrastructure*, 111th Cong., 1st sess., September 23, 2009 (prepared statement of Hon. Randolph Babbitt, Administrator, Federal Aviation Administration), <https://www.transportation.gov/testimony/federal-aviation-administrations-call-action-airline-safety-and-pilot-training>.

²⁰⁴ Letter from Principal Operations Inspector, *Southwest Airlines Certificate Management Office*, March 1, 2018, <https://www.commerce.senate.gov/services/files/F95D0F7E-40D8-44AD-BF44-A3C74CABD373>

²⁰⁵ U.S. Department of Transportation, Federal Aviation Administration, Flight Standards Service, *Weight and Balance Handbook*, FAA-H-8083-1B (Washington, DC, 2016), https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/media/faa-h-8083-1.pdf.

of Southwest Airlines, this information is entered into their PWB system, which the pilots rely on to calculate takeoff and landing performance.

Inspector Rees outlined an ongoing weight and balance compliance issue at Southwest Airlines. In April 2018, the FAA initiated an enforcement investigation of weight and balance compliance on Southwest Airlines flights. Southwest Airlines was allowed by FAA management to self-report compliance based on a self-audit of twenty-five percent of their daily flights. Southwest reported that seventy-eight percent of the flights audited were not compliant with FAA weight and balance regulations. In response, Southwest Airlines spent three months attempting to obtain a waiver to redefine “accurate” instead of correcting their weight and balance discrepancies. The regulatory definition requires a deviation of zero pounds between actual weight and weight entered into the PWB system.²⁰⁶ Southwest Airlines requested that the definition be changed to a maximum allowed deviation of 1500 pounds. This effort was supported by some local FAA managers, but after continued objection by Inspector Rees, it was eventually rejected by FAA headquarters.

In August 2018 Southwest Airlines grounded sixty-six airplanes due to aircraft weight issues.²⁰⁷ In January 2020 the FAA proposed a 3.92 million civil penalty alleging “that between May 1, 2018, and August 9, 2018, Southwest operated forty-four aircraft on a total of 21,505 flights with incorrect operational empty weights, and center of gravity or moment data.”²⁰⁸

Inspector Rees states that despite his efforts, this non-compliance is ongoing. Coupled with the reduced performance safety margins incorporated in the new PWB system, as well as inadequate training for situations that weight and balance discrepancies may create, he expressed ongoing concerns about the safety situation at Southwest Airlines. Appearing to support Inspector Rees’ assertions is the fact that Southwest Airlines grounded 115 Boeing 737-800 planes, just five months ago on July 16, 2020.²⁰⁹ This grounding follows over two years of attempted FAA compliance efforts, a civil penalty, and a DOT OIG audit which found the FAA to have not followed its own guidance and allowed Southwest Airlines “to continue reporting inaccurate and non-compliant weight and balance data based on the carrier’s risk determination.”²¹⁰

FAA whistleblowers report that recently there have been instances where pilots at Southwest Airlines have had difficulty getting their aircraft airborne. Preflight calculations are

²⁰⁶ Ibid.

²⁰⁷ Lewis Lazare, “Southwest Airlines Suddenly Grounds Scores of Planes Due to Aircraft Weight Issues,” *Chicago Business Journal*, August 13, 2018, <https://www.bizjournals.com/chicago/news/2018/08/13/southwest-airlines-suddenly-grounds-scores-of.html>.

²⁰⁸ U.S. Department of Transportation, Federal Aviation Administration, “Press Release—FAA Proposes \$3.92 Million Civil Penalty against Southwest Airlines,” January 10, 2020, https://www.faa.gov/news/press_releases/news_story.cfm?newsId=24575.

²⁰⁹ Claudette Covey, “Southwest Temporarily Grounds 115 Planes,” *MSN*, September 17, 2020, <https://www.msn.com/en-us/travel/news/southwest-temporarily-grounds-115-planes/ar-BB199HXc>.

²¹⁰ U.S. Department of Transportation, Office of Inspector General, *FAA Has Not Effectively Overseen Southwest Airlines’ Systems for Managing Safety Risks*, AV2020019, February 11, 2020, p. 8, <https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Southwest%20Airlines%20Final%20Report%5E02.11.2020.pdf>.

performed by software applications that take inputs such as the weight and balance of the aircraft, the weather, the runway length, and available fuel to provide pilots with takeoff instructions such as trim settings and necessary thrust. An audit recently completed by the Department of Transportation's Office of Inspector General (DOT OIG) detailed issues with these systems at Southwest Airlines.²¹¹ In the aforementioned instances, the pilots found that the trim setting calculations were incorrect during takeoff. Pilots had to aggressively use the electronic trim switches in order to affect enough change in trim to get the plane airborne. FAA whistleblowers state that the resulting trim settings often exceeded manufacturer tolerances for takeoff. Committee staff confirmed with whistleblowers and several experienced pilots that this is an extremely dangerous situation.

Inspector Rees contends that deference to the carrier to self-determine acceptable levels of risk while consistent with the FAA compliance philosophy is not effective oversight ensuring the highest level of aviation safety.

Retaliation

In February 2018, Inspector Rees submitted a complaint to the DOT OIG. He submitted another report to the OIG in March 2018. He submitted a third complaint to OSC in May 2018. The OSC investigation, which is ongoing, concerns allegations of retaliation against Inspector Rees for his OIG disclosures and whistleblowing activities. Shortly after his submissions, Inspector Rees experienced what he characterized as escalating retaliation by managers, including inappropriate admonishments to not release any information to entities outside of the FAA.

Inspector Rees advised the Committee he was recently interviewed pursuant to an investigation and received a proposed suspension of ten days for a complaint made against him by a private air operator during a local city council meeting in September 2019. Rees believes the Report of Investigation (ROI) appears to lack objectivity. Among other irregularities, the only persons interviewed about the incident were the complainant and others that shared the interests of the complainant. No objective witnesses were interviewed.

"Skyline" Aircraft

Charalambe "Bobby" Boutris contacted Committee investigative staff in June 2020. Inspector Boutris is employed as an ASI currently assigned to the FAA CMO for Southwest Airlines, and specializes in maintenance. He has worked as an ASI in the FAA for over twenty-two years. Boutris previously blew the whistle on the FAA and Southwest in 2008.²¹² On April, 3, 2008, Inspector Boutris testified at a hearing before the House Committee on Transportation and Infrastructure that his FAA managers had refused to ground Southwest Airlines aircraft after he discovered cracks in their fuselage, and that Southwest Airlines had flown forty-six aircraft

²¹¹ Ibid.

²¹² Alan Levin, USA TODAY, "Inspectors: FAA Officials Gave Southwest a Pass on Safety Checks," *ABC News* March 17, 2008, <https://abcnews.go.com/Travel/story?id=4418520&page=1>.

that were well overdue for inspections.²¹³ Southwest Airlines was fined \$10.2 million as a result of these overdue inspections, the largest in FAA history at the time.²¹⁴ The case received significant media attention at the time.²¹⁵ Inspector Boutris contacted the Committee to raise a number of concerns related to FAA's oversight of Southwest Airlines.

During the period of 2013 through 2017, Southwest Airlines procured eighty-eight airplanes, referred to by Southwest Airlines as the "Skyline Aircraft". These aircraft were purchased used and previously operated by sixteen various foreign air carriers. Southwest Airlines used multiple contractors to conduct the required records review and airworthiness inspection of these aircraft. Delegated Agency Representatives (DAR) designated contractors are permitted by the FAA to examine and inspect airplanes prior to the issuance of airworthiness certificates and other approvals.²¹⁶ After contractors conducted their reviews, Southwest Airlines, through the DAR process approved by the FAA, were issued eighty-eight aircraft Airworthiness Certificates, allowing them to enter revenue service.²¹⁷ Beginning in late 2017 Inspector Boutris began raising safety concerns related to the Skyline Aircraft as a result of safety inspections. The inspections discovered numerous repairs to critical structures of the airplanes which did not conform to airworthiness requirements.

In December 2017, Inspector Boutris informed his office manager of his initial concerns and at the same time he sent a letter to Southwest Airlines.²¹⁸ Additional letters escalating the situation to an enforcement action finally overcame Southwest Airlines unresponsiveness.

On April 3, 2018, Inspector Boutris shared his concerns in an email to FAA's office of Audit and Evaluation (AAE). Inspector Boutris made subsequent notifications to AAE during 2018. Specifically, in a September 19, 2018, email he requested that the office look into his safety concerns regarding the eighty-eight Skyline aircraft.²¹⁹

In May of 2018, ASI Boutris discovered additional discrepancies in the records of some of the eighty-eight Skyline aircraft during routine inspections. The discovery prompted a full records review by Southwest Airlines of all eighty-eight aircraft. This review revealed 360 major repair that had been previously unknown to Southwest Airlines because they were not disclosed

²¹³ U.S. Congress, House of Representatives, Committee on Transportation and Infrastructure, *Critical Lapses in Federal Aviation Administration Safety Oversight of Airlines: Abuses of Regulatory "Partnership Programs": Hearing Before the Committee on Transportation and Infrastructure*, 110th Cong. 2d sess., April 3, 2008, <https://www.govinfo.gov/content/pkg/CHRG-110hhrg41821/pdf/CHRG-110hhrg41821.pdf>.

²¹⁴ Johanna Neuman, "FAA's 'Culture of Coziness' Targeted in Airline Safety Hearing," *Los Angeles Times*, April 4, 2008, <https://www.latimes.com/travel/la-trw-airlines4apr04-story.html>.

²¹⁵ NPR, "FAA Too Close to Airlines," April 3, 2018, <https://www.npr.org/templates/story/story.php?storyId=89341199>.

²¹⁶ U.S. Department of Transportation, Federal Aviation Administration, "Individual Designees," last modified January 31, 2019, https://www.faa.gov/other_visit/aviation_industry/designees_delegations/individual_designees/.

²¹⁷ U.S. Senate Committee on Commerce Science and Transportation, "Fact Sheet: Southwest Airlines Skyline Aircraft Concerns," November 11, 2019, <https://www.commerce.senate.gov/2019/11/fact-sheet-southwest-airlines-skyline-aircraft-concerns>

²¹⁸ United States Department of Transportation, Federal Aviation Administration, *Memorandum*, September 28, 2018, <https://www.commerce.senate.gov/services/files/0CE954C0-FADC-44FA-B20B-D41CF7C3DC22>

²¹⁹ Email from Charalambe Bobby Boutris, April 3, 2018, <https://www.commerce.senate.gov/services/files/4549B5DD-6201-45A8-8EEC-F09EBAB61A5C>

in the contractors' initial review of the aircraft records. According to *14 CFR § 1.1 - General definitions* a Major Repair is a repair:

(1) That, if improperly done, might appreciably affect weight, balance, structural strength, performance, power plant operation, flight characteristics, or other qualities affecting airworthiness; or

*(2) That is not done according to accepted practices or cannot be done by elementary operations.*²²⁰

Despite the nature of the repairs, clearly deficient work completed by the DAR designated contractors, and Inspector Boutris' objections, the planes were permitted to continue in revenue operation by the FAA.²²¹

On September 18, 2018, Inspector Boutris, via e-mail, requested the assistance and support of the Flight Standards Service, Deputy Executive Director Michael J. Zenkovich. On September 19, 2018, via e-mail, Mr. Zenkovich responded by stating that he had talked to the Aviation Safety - Air Carrier Safety Assurance Director Timothy D. Miller to work through the issues. On September 19, 2018, via e-mail, Inspector Boutris made an official disclosure to the Office of Audit and Evaluation (AAE) and provided a full consent to disclose his name, requesting their assistance in looking into the concerns regarding the Skyline Aircraft. Initially, Inspector Boutris had contacted the AAE via e-mail on April 3, 2018, regarding the Skyline issues. On September 28, 2018, Inspector Boutris sent a Memo to the Aviation Safety - Air Carrier Safety Assurance Director Timothy D. Miller containing specific concerns that were based on the findings regarding the eighty-eight Skyline Aircraft.²²² On November 21, 2018, Inspector Boutris via e-mail, raised his concerns regarding the Skyline aircraft to Mr. Alan Stephens (AFC-300, Division Manager), who despite the on-going alarming findings (records did not represent the actual status of the aircraft and physical inspections of the aircraft did not reflect the records) appeared to downplay the concerns with the issuance of the Airworthiness Certificates on the Skyline Aircraft.

On November 21, 2018, due to the lack of support from FAA leadership, Inspector Boutris reported his concerns associated with the findings and the continuous operation in revenue service of the Skyline Aircraft to the OIG team while they were on site performing an on-going Audit/Investigation and requested that the OIG look into it.

²²⁰ Cornell Law School, Legal Information Institute, "14 CFR § 1.1 - General Definitions," <https://www.law.cornell.edu/cfr/text/14/1.1>.

²²¹ Email from Michael Zenkovich to Charalambe Boutris, September 18, 2018), <https://www.commerce.senate.gov/services/files/8031648E-9057-4B65-B98B-6C1B9A527FE3>

²²² United States Department of Transportation, Federal Aviation Administration, *Memorandum*, September 28, 2018, <https://www.commerce.senate.gov/services/files/0CE954C0-FADC-44FA-B20B-D41CF7C3DC22>

On November 27, 2018, Southwest Airlines grounded 34 Boeing 737-700 aircraft. Media reporting on the grounding revealed an FAA mandate for inspections of planes acquired from foreign vendors.²²³

On November 28, 2018, via e-mail, Mr. Miller, Director, Aviation Safety, Air Carrier Safety Assurance, informed Inspector Boutris that based on the elevated risk that the CMO was identifying, he had requested that Alan Stephens, AFC-300, Division Manager, devote 100 percent of his time to the CMO. On October 24, 2019, via e-mail, Inspector Boutris raised his concerns in detail to the Deputy Director, Office of Air Carrier Safety Assurance but got no response/support. Finally, dissatisfied with inaction at all levels of FAA management, Inspector Boutris shared his safety concerns with the DOT OIG in November 2018.²²⁴

Despite Inspector Boutris' repeated reporting and elevation of his safety concerns, the FAA agreed to allow Southwest Airlines to continue operating these aircraft in revenue service while they assessed the previous repairs over a two year period with a target completion date of July 1, 2020. As a result, Southwest Airlines continued to operate dozens of aircraft in an unknown airworthiness condition for thousands of flights for several years after Inspector Boutris repeatedly raised significant aviation safety concerns. Inspector Boutris disagreed vehemently with FAA management's assessment and authorization of the protracted inspections while the planes remained in service. As detailed above, Inspector Boutris had elevated his concerns within the FAA Southwest Airlines CMO and to senior FAA management without success. He then took these concerns to the DOT OIG in 2018. The IG investigated and substantiated the concerns. The IG briefed FAA management on its initial findings on October 24, 2019. That same day, the Director of FAA's AAE, Clay Foushee, sent FAA Administrator Steve Dickson an urgent memo summarizing the Skyline Aircraft issue and recommending that the FAA take immediate action to either suspend or revoke the airworthiness certificates of the forty-nine aircraft that had yet to be completely inspected.²²⁵ According to Inspector Boutris, and supported by documents obtained by the Committee, AAE was aware of Inspector Boutris' concerns as early as November 2018 and failed to take action for two years. According to AAE officials, the matter was adopted by the OIG and therefore not pursued to ensure de-confliction as a matter of standard protocol.

On October 4, 2019, Southwest Airlines provided the FAA a quarterly report as part of its FAA-approved program to review all of the Skyline Aircraft repairs. The report explained that of the eighty-eight Skyline Aircraft, thirty-nine had been fully reviewed; twenty-four of those thirty-nine aircraft were found to have undocumented repairs that were non-conforming to compliance requirements. As a result of this report and of the OIG briefing, on October 29, 2019,

²²³ Lewis Lazare, "Southwest Airlines Suddenly Grounds 34 Planes in Its Fleet," *Chicago Business Journal*, November 18, 2018, <https://www.bizjournals.com/chicago/news/2018/11/26/southwest-airlines-suddenly-grounds-34-planes.html>

²²⁴ Email from Bobby Boutris, *Concerns for the Safety of the Flying Public*, October 24, 2019, <https://www.commerce.senate.gov/services/files/3DD436BB-84FB-4E2F-91D9-FE58D13EE69E>

²²⁵ Memorandum from H. Clayton Foushee, Director, Office of Audit and Evaluation, AAE-I to Steve Dickson, Administrator, Federal Aviation Administration (October 24, 2019), <https://www.commerce.senate.gov/services/files/489A89CB-6EE1-4906-ABFA-3875F43D6C67>

FAA Southwest Airlines CMO Manager John Posey sent a letter to Southwest Airlines Chief Operating Officer Michael Van de Ven expressing concern about both the speed with which Southwest Airlines was completing the required inspections and the potential for the remaining forty-nine aircraft to require the same immediate inspections and required repairs as necessary to come into compliance.²²⁶ The letter gave Southwest Airlines two business days to conduct a Safety Risk Analysis (SRA) to determine whether issues identified in the evaluation of the first thirty-nine aircraft signal a trend that will be repeated in the remaining forty-nine.

On October 29, 2019, upon receipt of the Posey letter, Chairman Wicker spoke to FAA Deputy Administrator Daniel Elwell to express his significant concerns.

On October 31, 2019, Southwest Airlines provided a response to John Posey's letter. In Southwest Airlines' letter, the company states that they assess a low risk associated with the remaining aircraft and any unknown major repairs.²²⁷ Committee staff spoke to several FAA whistleblowers, engineers, and industry experts regarding this Safety Risk Analysis. To date, it is unclear how any unknown repairs can be deemed low risk. Southwest Airlines also accelerated the timeline for completing the remaining inspections by five months – from July 1, 2020, to January 31, 2020. In response, the FAA communicated to Congressional committees of jurisdiction that it believed Southwest Airlines was taking the FAA's concerns seriously and that revoking the airworthiness certificates of the uninspected aircraft is unnecessary.

According to two FAA whistleblowers in addition to Inspector Boutris, the initial review of maintenance records conducted by contractors was alarmingly insufficient. These whistleblowers indicate that maintenance and repair documents are critical to the airworthiness inspection process, as they are used to “bridge” repairs to inspections therefore determining airworthiness requirements. Whistleblowers claim one contractor did not even translate many of these foreign-language documents from the original foreign carriers in order to effectively evaluate what repairs and maintenance had or had not been completed on the airplanes.

The whistleblowers contend that as a result, Southwest Airlines knowingly relied on a flawed document review and subsequent inspections to issue the original Airworthiness Certificates pursuant to the DAR process. Whistleblowers conclude this is a stark example of dangerous self-regulation promoted by the FAA's compliance philosophy currently implemented as the Compliance Program.

Inspector Boutris asserts that the original Airworthiness Certificates issued were invalid based on his findings and should have been revoked when the scope of the deficiency was clearly understood and documented as early as November 2018. Inspector Boutris had previously elevated his concerns up his chain of command through the Southwest Airlines CMO manager, Deputy Executive Director of the FAA Flight Standards Service, the Director of the Office of Air

²²⁶ Letter from John Posey, Manager, Southwest Airlines CMO to Michael G. Van de Ven, Chief Operating Officer, Southwest Airlines Co. (October 29, 2019), <https://www.commerce.senate.gov/services/files/08997300-CF0B-41F9-99EA-2B7D324A179F>

²²⁷ Letter from John Posey, Manager, Southwest Airlines CMO to Michael Van de Ven, Chief Operating Officer, Southwest Airlines (October 29, 2019), <https://www.commerce.senate.gov/services/files/08997300-CF0B-41F9-99EA-2B7D324A179F>

Carrier Safety Assurance, and others copied on the emails. This confirms FAA officials were made aware of this issue at least as early as September 2018. Inspector Boutris articulated significant risk to aviation safety but FAA management at all levels failed to support him or take appropriate action

On October 30, 2019, Chairman Wicker sent a letter to FAA Administrator Stephen Dickson expressing concern about the Skyline Aircraft issue at Southwest Airlines.²²⁸ Chairman Wicker requested that Administrator Dickson provide updates on all developments related to the Skyline Aircraft issue.

On November 8, 2019, FAA officials briefed Committee staff on the Skyline Aircraft issue. In the briefing, FAA officials stated that they were satisfied with the Southwest Airlines response. During this telephonic briefing, Committee staff directly asked if the sum of completed and planned inspections was as rigorous as the inspection that is required for initial airworthiness certification. A clear answer was not provided. Whistleblowers contend that these disparate inspections over several years have not and will not be as thorough as a properly conducted initial airworthiness inspection and that unknown repairs could remain hidden and uninspected.

To date, Southwest Airlines has completed the conformity process of the eight-eight aircraft. In addition to the previously undocumented 360 major repairs that were found during the records review, the physical inspections of the eight-eight aircraft identified 182 additional major repairs on fifty-two aircraft, which required maintenance action to bring the aircraft into compliance with airworthiness regulations. To summarize, the inspections conducted by Southwest Airlines confirmed fifty-two airplanes did not conform to airworthiness requirements.

On February 11, 2020, the Department of Transportation's Office of Inspector General (DOT OIG) released its audit of the FAA's oversight of Southwest Airlines. Among other issues, the audit found that Southwest Airlines had "put 17.2 million passengers at risk" by operating aircraft in unknown airworthiness conditions, confirming allegations made by whistleblowers to the Committee.²²⁹

On March 3, 2020, Inspector Boutris expressed new concerns to the Committee indicating Southwest was obstructing FAA oversight into the Skyline Aircraft matter even after release of the DOT OIG's findings and this Committee's November 11, 2019, fact sheet.²³⁰ As part of Inspector Boutris' follow-up inspections, on February 14, 2020, he requested information about the documentation and repair process of these aircraft from the Southwest Airlines Engineering team. Inspector Boutris was told by a Southwest Airlines representative that he was now required to route his requests through Southwest's Regulatory Affairs team as a result of the

²²⁸ Letter from Roger F. Wicker, Chairman, U.S. Senate, Committee on Commerce, Science, and Transportation to Stephen Dickson, Administrator, Federal Aviation Administration (October 30, 2019) , <https://www.commerce.senate.gov/services/files/5EB3BEC9-BCC6-4CCB-A1CD-FE9402C52477>

²²⁹ Office of Inspector General, U.S. Department of Transportation, Audit Reports, FAA has not effectively overseen Southwest Airlines' System for Managing Safety Risks (Feb. 11, 2020) , <https://www.oig.dot.gov/library-item/37731>

²³⁰ U.S. Senate Committee on Commerce, Science, and Transportation, Fact Sheet: Southwest Airlines Skyline Aircraft Concerns (Nov. 11, 2019) , <https://www.commerce.senate.gov/2019/11/fact-sheet-southwest-airlines-skyline-aircraft-concerns>

“sensitive nature” of the Skyline aircraft matter. After several subsequent requests Inspector Boutris was finally able to obtain answers to his inquiries. Inspector Boutris’ manager, Mr. Robert Blisset, a Supervisory Principal Maintenance Inspector (PMI), appealed to local FAA leadership but did not receive sufficient support.

Inspector Blisset contacted the Committee to express concerns that he had been cut out of the decision making process of the CMO, despite being the local authority as the SPMI. Though he would normally be integral to the drafting of such letters, he was only made aware of John Posey’s October 29, 2019, letter to Southwest Airlines’ Chief Operating Officer immediately prior to it being sent.²³¹ He was not afforded any opportunity to provide input or approval to the letter.

In a letter in March of 2018, Southwest Airlines advised Inspector Boutris that they will not provide him the documents he has requested, and he must now route his request to the FAA Aircraft Certification Office’s (ACO) engineering department. Southwest Airlines is required by regulation to provide this information to the FAA upon request.²³² Inspector Boutris had noted that ACO does not determine whether aircraft are in compliance with airworthiness regulations, and therefore their involvement in oversight remains unclear. The regulatory oversight of maintenance and operations is the primary responsibility of the CMO. Inspector Boutris alleges FAA senior leadership is improperly favoring Southwest Airlines and not holding them properly accountable to regulations.

Inspector Boutris has also noted to the Committee that Tim Miller, a former Assistant Division Manager at the FAA, left his FAA post in 2016 to work at Air Traffic Services (ATS). The Committee investigation confirmed he had worked at ATS as Vice President (VP) of Quality, Safety, Environmental, and Training before being hired by Southwest. In addition, ATS was one of the contractors Southwest Airlines hired to perform maintenance and inspections of the Skyline aircraft during their introduction into Southwest’s fleet. These inspections were later found to be deficient by FAA whistleblowers and substantiated by a DOT OIG audit. In November 2019, Mr. Miller was hired by Southwest Airlines as a Senior Director of Regulatory Compliance and Director of Maintenance. Inspector Boutris alleges that Mr. Miller is leveraging his continued relationship with FAA senior managers to garner favor on behalf of Southwest Airlines. Inspector Blisset supports Inspector Boutris’ assertions and added that Mr. Miller provides direct guidance to FAA ASIs and has indicated he will circumvent them by appealing to managers if they don’t comply with his requests. Committee interviews of FAA staff revealed at least one FAA Flight Standards senior manager maintains a personal relationship with Mr. Miller. The employee, during an interview, assured Committee investigators there was no conflict of interest.

The Committee’s investigation found that another former FAA executive, Steve Douglas, is Vice President of Certification, Compliance, Quality and Safety at CAVOK Group, a company contracted by Southwest Airlines to conduct the document review for the Skyline Aircraft. The DOT OIG report determined this review to be woefully deficient. Inspector Boutris and several other whistleblowers contend a proper document review would normally take at least several

²³¹Letter from John Posey, Manager, Southwest Airlines CMO to Michael G. Van de Ven, Chief Operating Officer, Southwest Airlines Co. (October 29, 2019), <https://www.commerce.senate.gov/services/files/08997300-CF0B-41F9-99EA-2B7D324A179F>

²³² 14 CFR 119.59 – Conducting tests and inspections, <https://www.law.cornell.edu/cfr/text/14/119.59>

weeks, and the fact that the documents weren't even translated into English suggests they were simply "rubber stamped." The DOT OIG audit found that, although FAA designee certification usually takes three to four weeks, seventy-one of the eighty-eight Skyline Aircraft were approved by FAA designees in a single day, and many maintenance documents were never translated into English.²³³ According to testimony by FAA Flight Standards Supervisor Terry Lambert to the House Committee on Transportation and Infrastructure on April 3, 2008, in October 2007, Mr. Douglas directed him to destroy notes related to the Committee's oversight investigation at that time.²³⁴ Thirteen years later, Mr. Douglas is in an executive leadership position for a company that appears to have provided deficient and possibly fraudulent services to Southwest Airlines to certify the airworthiness of commercial aircraft.

The events described above are extremely concerning. Inspector Boutris made initial safety concerns about the Skyline Aircraft known to his management in December 2017. He conveyed these concerns to AAE, the office responsible for investigating FAA whistleblower aviation safety claims, in April 2018. Inspector Boutris made numerous subsequent notifications to AAE and FAA senior management during 2018 and 2019. Despite Inspector Boutris' repeated articulation of an ongoing safety issue, AAE did not take action until October 24, 2019, when, after being briefed on the DOT OIG's audit findings, AAE Director Clay Foushee sent FAA Administrator Dickson an urgent memo urging him to immediately ground the aircraft in question.²³⁵

The FAA's response to the DOT OIG's audit regarding FAA oversight of Southwest Airlines oversight found fault with the Southwest FAA Certificate Management Office's (CMO) oversight of Southwest Airlines. In its response, the FAA stated that when FAA leadership became aware of these issues, appropriate actions were taken. This response by the FAA is not accurate. Inspector Boutris informed his office manager of these issues in December 2017, informed the director of AAE in April 2018, and after becoming frustrated with the lack of oversight, elevated his concerns to the Director for Air Carrier Safety Assurance, Tim Miller, in September 2018 and the FAA Manager for Air Carrier Safety Assurance, Alan Stephens, in November 2018.²³⁶ The Committee is unaware of any FAA employee being held accountable for the numerous management failures handling the Skyline Aircraft issue.

The Skyline Aircraft scenario described above reads almost identically to the same issues that transpired over twelve years ago. Inspectors raised significant concerns about safety, identified clear non-compliance, and were overruled by FAA management. This dysfunction inserts an unnecessary risk to the flying public.

²³³ U.S. Department of Transportation, Office of Inspector General, *FAA Has Not Effectively Overseen Southwest Airlines' Systems for Managing Safety Risks*, AV2020019 (Washington, DC, 2020), <https://www.oig.dot.gov/sites/default/files/FAA%20Oversight%20of%20Southwest%20Airlines%20Final%20Report%5E02.11.2020.pdf>.

²³⁴ U.S. Congress, House of Representatives, Committee on Transportation and Infrastructure, *Critical Lapses in Federal Aviation Administration Safety Oversight of Airlines: Abuses of Regulatory "Partnership Programs": Hearing Before the Committee on Transportation and Infrastructure*, 110th Cong. 2d sess., April 3, 2008, <https://www.govinfo.gov/content/pkg/CHRG-110hhrg41821/pdf/CHRG-110hhrg41821.pdf>.

²³⁵ Memorandum from H. Clayton Foushee, Director, Office of Audit and Evaluation, Federal Aviation Administration, to Steve Dickson, Administrator, Federal Aviation Administration, October 24, 2019, <https://www.commerce.senate.gov/services/files/489A89CB-6EE1-4906-ABFA-3875F43D6C67>.

²³⁶ Ibid.

Robert Blisset

Mr. Robert Blisset first spoke to Committee staff in April 2020. At the time of his disclosures to the Committee, Inspector Blisset was the Supervisory Principal Maintenance Inspector for Southwest Airlines at the FAA's Southwest Airlines CMO. He took a new position as Assistant Office Manager for the American Airlines CMO in July 2020. Inspector Blisset requested this voluntary reassignment to escape the pressure by his managers to allow Southwest Airlines to continue operating in a non-compliant manner. Inspector Blisset had filed a complaint with the OSC but withdrew the complaint upon his reassignment.

Inspector Blisset independently corroborated many of the disclosures made by Inspector Boutris and Inspector Rees. Inspector Blisset reports being sidelined by his FAA managers in discussions directly related to maintenance compliance issues at Southwest after he raised concerns about the Skyline Aircraft. While Inspector Blisset was directly responsible for oversight of maintenance at Southwest Airlines, he was not aware of John Posey's October 29, 2019, letter to Southwest Airlines Chief Operating Officer Michael Van de Ven until after it was sent. Inspector Blisset reports that he was allowed to read the letter but not allowed to keep a copy.

Inspector Blisset expressed concerns about the Southwest Airlines ETOP certification process similar to the concerns expressed by Inspector Rees. Inspector Blisset reports being excluded from the process by Alan Stephens, the FAA's Air Carrier Safety Assurance Division Manager. Inspector Blisset had expressed concerns related to the ETOPS process due to other ongoing regulatory non-compliance issues with the Continuous Airworthiness Maintenance Program (CAMP).

Similar to Inspector Boutris, Inspector Blisset made allegations that Tim Miller, Southwest Airlines Senior Director of Regulatory Compliance and Director of Maintenance, repeatedly went over his head to his FAA managers. Inspector Blisset was inadvertently added to a group text message chain between Mr. Miller and FAA CMO Managers John Caldwell and Rebecca Hoover in which Mr. Caldwell said, "If so, I would like -300 (AFS300 is the FAA's Aircraft Maintenance Division) in our request. They will help stamp down anything from Rob."²³⁷ Inspector Blisset is concerned that comments like these illustrate an inappropriately close relationship between senior managers at Southwest and the FAA.

To further illustrate that relationship, Inspector Blisset provided numerous examples of instances where he was pressured by his managers to be more lenient and less adversarial with the carrier. He also shared communications with flight standards managers in which he objected to being excluded from decision making processes for which he was responsible. Inspector Blisset also clearly articulated his concerns to flight standards senior management citing regulations in support of his position of not having the discretion to allow a carrier to continue operations while not compliant. In one email he states:

I was unable to find any FAA Order, Guidance, Policy or Regulation that provides me as an SPMI or any Principal Inspector, for that matter, the sole authority to allow a Certificated 121 Air Carrier to deviate or be exempted from a regulatory requirement and allow them to continue to

²³⁷ Messages on file with the Committee Staff

operate an aircraft that is un-airworthy from the perspective of not meeting type design or it's properly altered condition (14 CFT Part 21, 25, 26) or regulatory requirements associated with maintaining their aircraft. (14 CFR Part 39, 119 and 121)

On May 28, 2019, PMI Robert Blisset sent a certified letter to Southwest Airlines advising the carrier that their Voluntary Disclosure Reporting Program (VDRP) submissions indicating one of their “Boeing 737-400 aircraft had overflowed the requirements of Airworthiness Directive (AD) 2007-25-03” was denied.²³⁸ Inspector Blisset noted that Southwest kept the airplane in revenue service after the non-compliance was identified. Also noted in the letter is the concern that additional aircraft may be affected by this AD. In the denial Inspector Blisset stated:

Based on the requirements of FAA ORDER 8000.89 (CHG I, Dated October 1, 2016), and the VDRP Advisory Circular (AC) 00-58B, the VDRP was not accepted on the basis that SWA failed to take immediate action and cease the non-compliance upon discovery.

The above discrepancies appear to be a deviation to the Code of Federal Regulations.

This AD was due to aft pressure bulkhead. Six other airplanes were found to be affected under the same AD. These planes received AMOC to continue operations.

CMO Management

The FAA Southwest Airlines CMO has undergone numerous management changes over the past fifteen years. Upon review of documents and statements provided by whistleblowers and other FAA employee’s leadership has changed at least four times since 2007. Most recently in June 2019, three members of management were removed and reassigned in the midst of numerous whistleblower complaints and ongoing investigations and audits by the FAA, DOT OIG, OSC, and the Committee. During FAA employee staff interviews conducted by Committee investigators, senior managers in flight standards confirmed none of the managers were disciplined in this reassignment but rather they were reassigned as a matter of management discretion.

Whistleblowers advised that the new managers lacked sufficient technical and management experience to lead the troubled office. Numerous whistleblowers within the Southwest CMO and throughout the FAA asserted to Committee staff that the individuals were “hand-picked” by Flight Standards senior management to smooth things out with Southwest and restore a “go along to get along,” culture. This assertion appears to be supported by the conduct of the CMO office manager (John Posey) in his letter to Southwest in October of 2019 regarding

²³⁸ “Airworthiness Directives; Airbus Model A310 Series Airplanes, Final Rule,” *Federal Register* 72, no. 236 (December 10, 2007): 69600-69601, <https://www.govinfo.gov/content/pkg/FR-2007-12-10/pdf/FR-2007-12-10.pdf>.

the Skyline Aircraft.²³⁹ Regulatory compliance and a recommendation to immediately ground the Skyline Aircraft by Director of Audit and Evaluation, Clay Foushee, was completely ignored.

In June 2019, following the removal of the FAA Southwest Airlines CMO management staff, several temporary “acting” managers were assigned to the CMO. According to Inspector Boutris he was admonished by one of the new acting managers about a ninety day clock on enforcement violations related to this open case on the Skyline Aircraft. Inspector Boutris advised the manager that due to Southwest’s continued effort on a comprehensive solution the case could remain open. Several days later, Inspector Boutris noticed files related to this enforcement case being printed on the office printer. He learned the new manager, despite his perceived understanding from the discussion a few days prior, was taking it upon his/her self to close the enforcement action. Inspector Boutris now understands that the acting manager had taken the case to regional and HQ legal who advised he/she had discretion to close or leave the action open. The acting manager directed Inspector Boutris to close the case despite his persistent objection. Inspector Boutris closed the case as instructed.

According to Inspector Boutris, the acting manager described in the events above had been selected without competition by the Flight Standards Division Manager. Inspector Boutris asserts that consistent with the other acting managers, this manager lacked qualifications or experience in airframe structure or related commercial carrier airworthiness inspections. Inspector Boutris, who had blown the whistle on very similar issues, states that nothing has changed in twelve years with regards to the oversight of Southwest Airlines or the FAA’s complicity in letting them operate as they wish instead of complying with regulations.

In March 2020, a whistleblower with direct knowledge of the FAA promotion process alleged to the Committee that improper promotion practices were used to install at least one of the new managers at the FAA Southwest CMO office. In this case the person selected for the promotion had only six years’ experience in the FAA. However, they were selected over more senior and more qualified applicants to lead the most challenging and troubled CMO in the country according to the whistleblower. The selection appears to have been made in order to continue senior management’s non-compliant ineffective oversight of Southwest Airlines. Inspector Boutris, Inspector Blisset, Inspector Rees, Inspector Minnehan, and several other whistleblowers all concur with this assertion.

In a more recent personnel action, CMO management selected an individual to serve as Acting PMI after the departure of whistleblower Robert Blisset from the position in July 2020. Upon arrival to the new acting position, ASIs learned the new Acting PMI was from a general aviation background and lacked any airframe structure or related commercial carrier airworthiness inspections experience traditionally required for this position. Further, CMO employees learned the individual selected was the spouse of a senior official at Air Traffic Service (ATS). ATS is a contract company that conducted much of the deficient review and inspections on the Skyline Aircraft. ATS is also where Mr. Tim Miller, former FAA official and current Southwest Airlines Senior Director of Regulatory Compliance and Director of

²³⁹ Memorandum from H. Clayton Foushee, Director, Office of Audit and Evaluation, Federal Aviation Administration, to Steve Dickson, Administrator, Federal Aviation Administration, October 24, 2019, <https://www.commerce.senate.gov/services/files/489A89CB-6EE1-4906-ABFA-3875F43D6C67>.

Maintenance, worked immediately prior to arriving at Southwest Airlines in December, 2019. Committee interviews revealed that Mr. Tim Miller maintains a personal relationship with a senior Flight Standards manager with responsibility over the Southwest CMO. A CMO employee suspecting an ethics violation filed a complaint about the potential improper selection of the temporary SPML. Subsequently, during an all hands meeting with CMO staff, the Office Manager and an assistant office manager verbally identified the employee who had made the complaint. On September 2, 2020 Committee staff requested documentation related to this event and have yet to receive a response. If the process follows the many others Committee staff has reviewed, the investigation could be assigned to the line of business. In this case the investigation may be assigned by a senior manager in the line of business who is personal friends with a senior Southwest official who worked at ATS with the selected Acting PMI's spouse.

In DOT OIG audit report released in February 2020, the FAA adopted several recommendations. One of the recommendations included remedial training on voluntary disclosure programs and related compliance. During a training presentation, FAA staff from presented instruction on VDRP.²⁴⁰ The instruction affirmed that once non-compliance is discovered operations must stop. Once operations have ceased, a VDRP can be filed and an AMOC can be considered and approved. Operations are only permitted to resume after the AMOC is approved and received. Flight Standards Division Manager (Alan Stephens) interjected and suggested ASI had discretion in this regard. Stephens asserted the ASI has latitude to determine if the non-compliance posed a safety risk. If no safety risk was determined the operator could continue flights. Stephens suggested retraining of inspectors in regards to discretion versus following the clear policy and regulations. The Division Manager was supported in his position by a Deputy Director of Air Carrier Safety Assurance who was also in attendance. Debate erupted on this issue and the instructor leading the course corrected Mr. Stephens, clarifying no such discretion exists and that an AMOC cannot be granted retroactively especially when operations did not cease after discovering non-compliance. This event was attended and witnessed by staff from AAE to witness adoption of DOT OIG recommendations from its Southwest Airlines report. These events as described support a consistent assertion by front line inspectors that flight standards management either lacks the technical knowledge related to aviation safety oversight or choose to ignore it. In either event it is a stark illustration of the division between FAA management and inspectors.

More than twelve years after the 2008 congressional oversight hearings, this report details numerous disclosures detailing safety concerns by multiple whistleblowers at the Southwest Airlines CMO. These concerns, as they were in 2008, are supported by DOT OIG findings which include overflying of Airworthiness Directives and putting millions of commercial passengers at risk.

²⁴⁰ U.S. Department of Transportation, Federal Aviation Administration, *Voluntary Disclosure Reporting Program*, advisory circular 00-58B, (Washington, DC, 2009), https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_00-58B.pdf.

Finding: The FAA repeatedly permitted Southwest Airlines to continue operating dozens of aircraft in an unknown airworthiness condition for several years. These flights put millions of passengers at risk.

Finding: Southwest Airlines successfully exerts improper influence on the FAA to gain favorable treatment related to regulatory compliance and voluntary reporting programs.

Finding: FAA appears to select managers in the Southwest Airlines Certificate Management Office (CMO) who lack relevant experience and do not provide effective regulatory compliance or enforcement.

Finding: FAA managers undermine Aviation Safety Inspectors (ASI) and in some cases retaliate against them for conducting diligent oversight and making protected safety disclosures.

Finding: The FAA has failed to hold anyone accountable for lapses in oversight of Southwest Airlines.

Finding: FAA continues to retaliate against whistleblowers instead of welcoming their disclosures in the interest of safety.

VIII. Conclusion

The FAA is responsible for the regulation and oversight of the U.S. aviation industry with safety as the primary goal. The Committee's twenty month investigation incorporated information from fifty-seven whistleblowers, thousands of pages of documents, and numerous interviews. Committee investigators discovered numerous systemic deficiencies in FAA oversight. These deficiencies included ineffective or complete lack of oversight, resulting in unnecessary risk to the flying public. In many cases FAA management appears to be aware, and in some cases complicit in thwarting the very oversight they are charged with directing and supervising. In the most alarming cases, whistleblowers have warned of tragedies before they occur only to be retaliated against by managers. Unfortunately, much of what has been detailed in this report has been well known and reported on for decades. Despite this awareness, the FAA has failed to correct course and solidify an effective safety culture.

A recent survey completed by the FAA largely confirms what whistleblowers alleged and Committee investigators confirmed.²⁴¹ The fear of retaliation in the FAA persists. This fear of employees charged with oversight to ensure safety clearly presents an unnecessary risk to the flying public.

There is continued absence of updated policy, procedures, the certification of personnel, and best practices related to whistleblower retaliation investigations despite the creation of AAE in 2012.²⁴² Based on evidence reviewed by the Committee, the FAA appears to move employees into different positions rather than holding people accountable for their actions.

FAA policies appear to have reduced effective oversight by abdicating responsibilities to the carriers. These actions within the administration have not gone unnoticed. It is imperative that the FAA is proactive to ensure that their policies, procedures, and certifications are consistent, followed, and enforced in order to keep the American public and travelers' safe at all times.

On September 10, 2020, the Senate Committee on Commerce, Science, and Transportation (CST) introduced the FAA Accountability Enhancement Act, S.4565. On November 18, 2020, the Act was added to the Aircraft Safety and Certification Reform Act of 2020, S. 3969, and was voted favorably out of Committee. In its final form, the Act would establish a Whistleblower Ombudsman within the FAA, rename the Office of Audit and Evaluation as the Office of Whistleblower Protection and Aviation Safety Investigations, and enable the newly renamed office to investigate claims of whistleblower retaliation. These key provisions of the FAA Accountability Enhancement Act may be included in the Omnibus legislative vehicle, which is expected to pass the House and Senate in the coming days. This legislation is representative of bi-partisan efforts supported by contributions of courageous

²⁴¹ U.S. Department of Transportation, Federal Aviation Administration, *Aviation Safety Organization Safety Culture Survey Findings*, February 28, 2020 (unpublished report, on file with the U.S. Senate Commerce, Science, and Transportation Committee).

²⁴² *FAA Modernization and Reform Act of 2012*, Public Law 112-95 (2012), <https://www.congress.gov/112/plaws/publ95/PLAW-112publ95.pdf>.

whistleblowers and dedicated FAA employees. Chairman Wicker believes this legislation would provide for significant enhancements to accountability, aviation safety, and whistleblower protection.

IX. Recommendations

- The Committee will request the Department of Transportation Office of Inspector General (DOT OIG) conduct a thorough review of the implementation of the FAA compliance philosophy and assess its effectiveness.
- Require AAE to investigate complaints that it receives or that are referred to, and clarify that the office receives and investigates complaints and information concerning aviation safety and whistleblower retaliation.
- Allow AAE to make recommendations for any disciplinary action arising from any of the office's investigations.
- Direct an Office of the Ombudsman to educate employees about whistleblower rights and prohibitions on retaliation. It would serve as an independent resource for agency employees to discuss their rights and remedies for any allegations of misconduct.
- Conduct outreach and training to mitigate misconduct and promote timely and appropriate processing of protected disclosures and allegations of reprisal.
- Direct the FAA Administrator to establish an investigative policy that governs misconduct investigations according to best practices to ensure independent and objective investigations.
- Direct the Administrator to establish a discipline management policy that governs adjudication of misconduct investigations.
- Continue improved engagement between Congress and the FAA. Furthermore, finding a way to be more responsive to Congressional requests and embrace oversight as a constructive means to improving accountability and aviation safety, therefore, saving lives.
- FAA should support legislative reform by implementing law completely while fulfilling the intent of Congress.