Grounded: How the 737 MAX Crashes Highlight Issues with FAA Delegation and a Potential Remedy in the Federal Tort Claims Act

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The over-delegation by the Federal Aviation Administration (FAA) of new aircraft design certification authority to the very companies seeking such certification has led to a stunning lack of oversight and bending to private economic interests. Congressional action must be taken to ensure that aircraft certification authority, if delegated to private entities, is not delegated to any entities with ties to the companies seeking certification, and FAA oversight must be tightened.

This Comment analyzes whether the Federal Tort Claims Act could provide a potential avenue for plaintiffs to challenge the FAA as it relates to its oversight and delegation to The Boeing Company (Boeing). In the face of inaction from the FAA, Boeing, and Congress, the judiciary provides the best hope for holding the FAA accountable when it delegates authority to private industry leaders like Boeing. It is likely well within the FAA’s discretion to determine that the engineers at Boeing to whom Boeing would assign to this task are qualified in their engineering capabilities. However, if the FAA knew that economic pressures and factors outside of plane safety were guiding Boeing executives’ directions to its inspecting engineers, it may have delegated its certification authority to unqualified individuals, which it cannot do.
I. INTRODUCTION

The U.S. Government’s over-delegation of new aircraft design certification authority to the very companies seeking such certification has led to a stunning lack of oversight and bending to private economic interests. Congressional action must be taken to ensure that aircraft certification authority, if delegated to private entities, is not delegated to any entities with ties to the companies seeking certification, and Federal Aviation Administration (FAA) oversight must be tightened.

This Comment begins by describing the background of the Boeing 737 (737) aircraft and the recent 737 MAX accidents. The serious consequences of those crashes are explored, and the scope of the problem is put into perspective. The Comment then explains the relevant historical background of the FAA and the designation program, establishes the framework within which recent issues faced by The Boeing Company (Boeing) reside, and discusses how the delegation program came to be and how the FAA designates private parties as Organization Designa-
tion Authority (ODA) holders (ODA Holders). Next, it analyzes the Federal Tort Claims Act (FTCA) and how the Supreme Court has interpreted the discretionary function exception to the FTCA.

This Comment then assesses whether the FTCA could provide a potential avenue for plaintiffs to challenge the FAA’s over-delegation of certification authority to Boeing. While this route was not historically open to plaintiffs, by delegating certain aspects of the safety inspection process to Boeing and failing to maintain oversight, the FAA’s actions have moved outside the protection of the discretionary function exception, allowing suits against the FAA by injured plaintiffs. This Comment concludes by discussing why litigation is the best way to spur meaningful reform.

II. HISTORICAL BACKGROUND

A. THE 737 MAX AND COMPETITION WITH AIRBUS

The Boeing 737 is one of the most widely recognizable passenger aircraft in the world. Since its first flight in 1967, the 737 has undergone a series of enhancements, culminating most recently with the 737 Next Generation (737NG) and the 737 MAX. These upgrades were designed to provide more fuel-efficient engines, updated avionics and cabins, and lower operating costs, all while having enough in common with previous models that pilots could easily switch back and forth between them. In 2006, Boeing began discussions to significantly upgrade or replace the 737NG with a new, more fuel efficient model. By 2010, Boeing still had not made a decision when one of its chief rivals in the industry, Airbus SE (Airbus), announced the A320neo, “a re-engined, more efficient version of its A320, the main competitor to the 737.” These two industry titans have been in competition for almost half a century, and many have wondered whether the tradeoffs being made in the interest of

2 Id.
3 Id.
4 Id. Neo stands for new engine option.
competition were dangerous.\textsuperscript{5} In 2011, Boeing’s then-CEO feared that American Airlines, one of Boeing’s exclusive customers, would switch to Airbus unless Boeing could convince them otherwise.\textsuperscript{6} Boeing decided to upgrade the engines on the 737 and build a new plane, launching Boeing’s effort to circumvent important regulatory hurdles.\textsuperscript{7} American Airlines wound up purchasing from Airbus, but also ordered 100 next generation 737s from Boeing, and “[j]ust one month later, Boeing announced the 737 MAX family,” the newest iteration of the 737.\textsuperscript{8} A key selling point of the 737 MAX was its purported similarity with older models, which would make it easier for pilots and staff to adjust to without much additional training.\textsuperscript{9} Significantly, and likely most important to Boeing executives, this provided a faster route to certification than what would be necessary for a brand new type of aircraft.\textsuperscript{10} One of the key differences in the new plane was that the engines were larger, further forward, and higher up than the previous version.\textsuperscript{11} This upgrade could cause the nose of the plane to pitch slightly upward in some situations, leading engineers to implement automated software called Maneuvering Control Augmentation System (MCAS), which would automatically push the nose down so that the plane stays level.\textsuperscript{12} Though theoretically the pilots could fly both the old and new planes, “Boeing did not include training on MCAS in the pilots’ manual, reasoning that the software would work in the background.”\textsuperscript{13} “MCAS was designed to take effect when a single sensor showed that the ‘angle-of-attack’ was high,” meaning the system would still respond if one of the two sensors broke.\textsuperscript{14} Issues surrounding this system would


\textsuperscript{6} Slotnick, \textit{supra} note 1.


\textsuperscript{8} Slotnick, \textit{supra} note 1.

\textsuperscript{9} \textit{Id.}

\textsuperscript{10} \textit{Id.}

\textsuperscript{11} \textit{Id.}

\textsuperscript{12} Cohan, \textit{supra note} 5; Slotnick, \textit{supra} note 1.

\textsuperscript{13} Slotnick, \textit{supra} note 1.

\textsuperscript{14} \textit{Id.}
later prove catastrophic. In 2015, the first 737 MAX was released, with its first test flight in 2016. It gained certification from the FAA in 2017. “By May 2018 . . . more than 130 [737 MAX] planes were in service with 28 different airlines around the world.”

B. THE LION AIR AND ETHIOPIAN AIRLINES CRASHES

On October 29, 2018, Lion Air Flight 610 took off from Jakarta, Indonesia in the early hours of the morning. The plane had given incorrect speed and altitude readings during a previous flight but was kept in service. Immediately after takeoff, the pilots received stall warnings; their instruments were not giving readings on key data, and it seemed the plane was automatically being forced into a downward pitch. Twelve minutes later, the plane crashed into the sea, killing all 189 on board. Shortly after the investigation began, MCAS and the pilots’ response became a focus, and the FAA and Boeing said they planned to issue an Airworthiness Directive on issues related to the system.

Less than five months later, a disturbingly similar scene played out in Ethiopia, when an Ethiopian Airlines flight crashed, killing everyone on board. Once again, pilots of a 737 MAX were unable to control the pitch of the aircraft, and MCAS forced the nose down and crashed the plane. Shortly after the crash, although it was clear MCAS played a role, investigators were unsure how much fault lay with the pilots. However, a year later, investigators determined that MCAS was entirely at

15 See infra Section II.B.
16 Slotnick, supra note 1.
17 Id.
18 Id.
19 Id.
20 Id.
21 Id.
22 Id.
23 Id.
25 Id.
26 Id.
fault, shining an even more negative light on the aircraft itself and on Boeing.\textsuperscript{27}

Ethiopian Airlines grounded the rest of its 737 MAX fleet the day of the crash.\textsuperscript{28} The rest of the world followed suit, and soon the highly publicized global grounding of the plane was in full force.\textsuperscript{29} However, the FAA was the last to do so.\textsuperscript{30} Boeing initially thought it could get the software issue fixed and the planes back up and running by the end of March 2019.\textsuperscript{31} But due to delays with the software updates, the FAA only cleared the 737 MAX aircraft to fly again in late 2020.\textsuperscript{32}

\section*{C. Fallout}

The fallout from the crashes continues to grow, touching all aspects of government (particularly the FAA), the airline industry, and Boeing. The FAA continued to scrutinize the plane following delays in a potential fix, which led to the entire certification process coming under scrutiny.\textsuperscript{33} Boeing has had to cut production of the 737 MAX, suffering significant losses.\textsuperscript{34} “[It] is in talks with banks to secure a loan of $10 billion or more . . . as the company faces rising costs stemming from two fatal crashes of its 737 MAX planes.”\textsuperscript{35} Recently, Boeing announced that further delays are expected after the recent disclosure of a software issue.\textsuperscript{36} These delays will continue to drive up costs as customers seek compensation for undelivered planes.\textsuperscript{37} Airbus has now surpassed Boeing as the world’s largest aircraft manu-

\begin{thebibliography}{99}
\bibitem{28} Slotnick, \textit{supra} note 1.
\bibitem{29} Id.
\bibitem{30} Id.
\bibitem{33} Slotnick, \textit{supra} note 1.
\bibitem{35} Id.
\bibitem{36} Id.
\bibitem{37} Id.
\end{thebibliography}
Congress has gotten involved and launched investigations into Boeing, the FAA, and the relationship between the two. Dennis Muilenburg, former Boeing CEO, testified before Congress in October 2019 and was subject to intense questioning. In December 2019, Boeing fired Muilenburg for his handling of the 737 MAX crises. During the congressional investigation, FAA administrator Steve Dickson gave a shocking piece of testimony: “After the first crash, an internal FAA analysis showed a high likelihood of future crashes, as many as 15 over the 30–40 year life of the jet. However, the FAA let the plane keep flying.”

The FAA commissioned the Joint Authorities Technical Review (JATR), consisting of technical experts from the FAA, National Aeronautics & Space Administration, European Union Aviation Safety Agency, Australia, Brazil, Canada, China, Indonesia, Japan, Singapore, and the United Arab Emirates. The review documented observations, findings, and a series of recommendations for actions that could be taken to help prevent similar tragedies from occurring.

III. CURRENT STATE OF THE LAW

A. BRIEF HISTORY OF THE FAA

In 1926, at the urging of aviation industry leaders, and in an effort to help air travel reach its full commercial potential, the Air Commerce Act was passed. Under this initial version of what would later become the Federal Aviation Act, the Secretary of Commerce was charged with “fostering air commerce, issuing and enforcing air traffic rules, licensing pilots, certifying aircraft, establishing airways, and operating and maintaining aids

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38 Id.
39 Slotnick, supra note 1.
40 Josephs, supra note 34.
41 Slotnick, supra note 1.
43 Id.
to air navigation.”45 One of the first tasks of the new Bureau of Air Commerce centered on air traffic control.46 But by the early 1930s, the Department of Commerce’s oversight responsibilities were already being called into question following crashes that killed a prominent football coach and a U.S. Senator.47 To ensure a focus on safety, President Franklin Roosevelt signed the Civil Aeronautics Act in 1938, establishing the Civil Aeronautics Authority (CAA) to conduct investigations into aviation accidents and provide recommendations to prevent future accidents.48 Just before the United States’ entry into World War II, the CAA took full control over air traffic control towers, making air traffic control a permanent federal responsibility.49 However, in 1956, a midair collision killed 128 people and highlighted the need for even greater oversight and safety control of national airspace.50

In 1958, the Federal Aviation Act was passed, transferring the CAA function to the new independent Federal Aviation Agency.51 Feeling a need for a coordinated transportation system among all modes of transportation, Congress authorized the creation of the Department of Transportation in 1966 and 1967.52 The Federal Aviation Agency became known as the FAA, and oversight of the FAA soon transitioned to the Department of Transportation.53 However, the new agency was not just tasked with safety, but also with fostering air commerce.54 As one commenter has noted, “This additional imperative has had a profound impact on the development of the FAA and its administrative functions over the past four decades.”55 Thus, from the beginning, the FAA has had to balance airline safety against commercial success in the airline industry—two positions that will inevitably conflict from time to time.56 Concerns over this

45 A Brief History of the FAA, supra note 44.
46 Id.
47 Id.
48 Id.; see also 49 U.S.C. § 1131.
49 A Brief History of the FAA, supra note 44.
50 Id.
52 A Brief History of the FAA, supra note 44.
53 Id.
54 Federal Aviation Act, pmbl.
56 Id.
“dual mandate” led to statutory amendments removing the “promoting” language and focusing more on safety. Nonetheless, “[o]ne salient apparent consequence of the FAA’s dual mandate has been its extensive reliance on the private entities it regulates.”

B. The Organization Designation Authority: Delegation of Certification Authority to Private Entities

Part of the legislation directing the Secretary of Transportation to promote safety in the airline industry granted the Secretary the discretion to “prescribe reasonable rules and regulations” governing aircraft inspection, including how the inspections would be accomplished. Congress, however, emphasized that air carriers themselves “retained certain responsibilities to promote the public interest in air safety.” Congress established a certification process to monitor and control how the airline industry complied with the regulations. At each step in this process, FAA employees inspect materials submitted by aircraft manufacturers for compliance, then issue the appropriate certificate to allow the manufacturers to produce and market their products.

Step one in this process is known as type certification. This involves obtaining FAA approval of the plane’s basic design. “By regulation, the FAA has made the applicant itself responsible for conducting all inspections and tests necessary to determine that the aircraft comports with FAA airworthiness requirements.” During this process, a prototype of the new

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57 Id. at 408.
58 Id. at 413.
60 Id.
61 Id.
62 Id. at 805.
64 Varig Airlines, 467 U.S. at 805.

Each applicant must make all inspections and tests necessary to determine

1. Compliance with the applicable airworthiness, aircraft noise, fuel venting, and exhaust emission requirements;
2. That materials and products conform to the specifications in the type design;
3. That parts of the products conform to the drawings in the type design; and
plane is developed, and ground and flight tests are conducted. The FAA then reviews all the submitted data and, if it finds the proposed design meets the minimum safety standards, it approves the design and issues a type certificate. However, production still cannot begin. Before production, a company must obtain a production certificate allowing it to produce copies of the prototype for commercial use. “To obtain a production certificate, the manufacturer must prove to the FAA that it has established and can maintain a quality control system to assure that each aircraft will meet the design provision of the type certificate.” While this certificate allows the manufacturer to mass produce the new aircraft, it still cannot be put into service. First, the FAA must grant an airworthiness certificate, essentially assuring the particular plane is safe for flying.

When an aircraft manufacturer like Boeing wants to upgrade its planes and introduce a major change in its design, yet another certificate is required: a supplemental type certificate.

If a person holds the [type certificate] for a product and alters that product by introducing a major change in type design that does not require an application for a new [type certificate] under § 21.19, that person must apply to the FAA either for an STC, or to amend the original type certificate under subpart D of this part.

To obtain this supplemental type certificate, the altered aircraft must meet its airworthiness requirements. Similar to the prior steps, the applicant must conduct the required inspections and tests to ensure its product complies with regulations. However, this is no small task. The FAA has a limited number of engineers

(4) That the manufacturing processes, construction and assembly conform to those specified in the type design.

14 C.F.R. § 21.33(b).

64 Varig Airlines, 467 U.S. at 805–06.
65 Id. at 806.
66 Id.
68 Varig Airlines, 467 U.S. at 806.
69 Id.
70 Id.; 14 C.F.R. § 21.183.
71 Varig Airlines, 467 U.S. at 806 (citing 14 C.F.R. § 21.113).
72 Id. (citing 14 C.F.R. § 21.113).
73 Id. (citing 14 C.F.R. § 21.115(a)).
74 Id.
and employees. Roughly 700 individuals are responsible for ALL design approvals, production & continued airworthiness of everything that flies and of that, maybe 400 are engineers. In contrast, private companies like Boeing employ thousands of employees. “According to the Boeing website, it has over 45,000 engineers spread throughout the entire company. With such a deep roster of talent, [Boeing] has incredibly deep and specific expertise for new designs and to manage the safety and airworthiness of the nearly 14,000 Boeing airplanes flying today.”

In response to the FAA’s limited resources, Congress has authorized the FAA to delegate some of its testing authority. The FAA “may delegate to a qualified private person, or to an employee under the supervision of that person, a matter related to (A) the examination, testing, and inspection necessary to issue a certificate under this chapter; and (B) issuing the certificate.”

Based on this provision, the FAA created the ODA program to delegate to private organizations its authority to inspect aircraft designs and issue certificates. “An FAA Designation ‘allows an organization to perform specified functions on behalf of the Administrator related to engineering, manufacturing, operations, airworthiness, or maintenance.’” This ODA system is designed to be a system of direct oversight.

Generally, to be considered as an ODA, an applicant must:

1. Have sufficient facilities, resources, and personnel, to perform the functions for which authorization is requested;
2. Have sufficient experience with FAA requirements, processes, and procedures to perform the functions for which authorization is requested; and
3. Have sufficient, relevant experience to perform the functions for which authorization is requested.

According to federal regulations:

The ODA Holder must—

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78 Id.
79 Id.
80 Id.
82 Riggs v. Airbus Helicopters, Inc., 939 F.3d 981, 984 (9th Cir. 2019).
83 Id. (citing 14 C.F.R. § 183.41 (a) (2020)).
84 14 C.F.R. § 183.47.
(a) Comply with the procedures contained in its approved procedures manual;
(b) Give ODA Unit members sufficient authority to perform the authorized functions;
(c) Ensure that no conflicting non-ODA Unit duties or other interreference affects the performance of authorized functions by ODA Unit members;
(d) Cooperate with the [FAA] Administrator in his performance of oversight of the ODA Holder and the ODA Unit;
(e) Notify the [FAA] Administrator of any change that could affect the ODA Holder’s ability to continue to meet the requirements of this part within 48 hours of the change occurring.

Though its origins date back to the 1950s, the ODA program itself began in 2005 and was not fully implemented until 2009. This system relies heavily on the integrity and transparency of the ODA holder and strict, careful oversight by the FAA.

C. THE FTCA AND THE FAA

In 1946, Congress enacted the Federal Tort Claims Act (FTCA) as part of the Legislative Reorganization Act. The FTCA authorizes suits against the United States for damages:

[F]or injury or loss of property, or personal injury or death caused by the negligent or wrongful act or omission of any employee of the Government while acting within the scope of his office or employment, under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred.

However, there are exceptions; the FTCA does not waive federal sovereign immunity in all respects. In particular, under the discretionary function exemption, the FTCA does not apply to

[a]ny claim based upon an act or omission of an employee of the Government, exercising due care, in the execution of a statute or regulation, whether or not such state or regulation be valid, or

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85 Id. § 183.57.
89 Fishback & Killefer, supra note 87, at 293.
90 Id. at 294.
based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a federal agency or an employee of the Government, whether or not the discretion involved be abused.91

The scope of the discretionary function exemption has been an area of dispute since the passage of the FTCA.92 “On the one hand, some saw the exception as standing for the simple proposition that the FTCA could not be used to review high-level policy decisions. On the other hand, some saw the exception as severely limiting what otherwise would have been a very broad waiver of sovereign immunity.”93

The seminal case regarding interpretation of the exception and the scope of the waiver is Dalehite v. United States.94 In that negligence case, explosions destroyed much of Texas City, Texas and killed hundreds of people.95 The cause of the explosions was fertilizer the government made and shipped to Europe as post-war aid.96 The easily-ignitable fertilizer was packaged in flammable paper containers with no hazard warning, leading to large explosions during loading onto ships.97 The plaintiffs alleged negligence by the large body of officials and employees involved in the program.98 Though the Supreme Court did not determine where the line for discretion ends, it held that the actions of the federal government—the decision to start the program and the actions taken in aid of the program—were not actionable as they involved some measure of discretion.99 The Court noted that “[w]here there is room for policy judgment and decision there is discretion. It necessarily follows that acts of subordinates in carrying out the operations of government in accordance with official directions cannot be actionable.”100 Critics of the decision noted its language was incredibly broad and could potentially encompass almost everything “except the most routine postal truck injury-type cases.”101

91 Id. (citing 28 U.S.C. § 2680(a)).
92 Id.
93 Id.
94 Id. (citing Dalehite v. United States, 346 U.S. 15 (1953)).
95 Id.
96 Id.
97 Id. at 294–95.
98 Id. at 295.
99 Id.
100 Id. (citing Dalehite v. United States, 346 U.S. 15, 35–36 (1953)).
101 Id. at 296.
In *United States v. S.A. Empresa De Viação Aerea Rio Grandense (Varig Airlines)*, a 1984 case addressing FAA delegation, the Supreme Court attempted to clarify its position and understanding of the discretionary function exemption.\(^{102}\) The *Varig* Court held that the discretionary function exemption barred the plaintiff’s FTCA suit challenging the FAA’s decision to delegate responsibility for compliance with FAA safety regulations to the aircraft manufacturer and its means of monitoring compliance.\(^{103}\) “The *Varig* Court explained that Congress included the discretionary function exception ‘to prevent judicial second-guessing of legislative and administrative decisions grounded in social, economic, and political policy through the medium of a tort suit.’”\(^ {104}\) The Court stressed that the exception not only protects discretionary acts of the government in its conduct regulating role but also protects its policy judgments.\(^ {105}\) Later Supreme Court decisions defined the outer limits of the discretionary function exemption,\(^ {106}\) stating that the exemption effectively does not apply when a statute, regulation, or policy specifically prescribes a course of action for a government employee to follow.\(^ {107}\) It is within this legal framework that this Comment considers the FTCA as a potential remedy for plaintiffs wronged by negligent government acts related to the Boeing 737 MAX crashes.

### IV. ANALYSIS

The legal issues facing Boeing and the FAA are extensive and are not fully explored in this Comment.\(^ {108}\) These include lawsuits against Boeing by the families of the victims, claims for compensation from airlines that have unfulfilled orders for the 737 MAX, and lawsuits by Boeing shareholders alleging fiduciary breaches.\(^ {109}\) While these suits address ancillary problems,

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\(^{102}\) *Id.* (citing *United States v. S.A. Empresa de Viação Aerea Rio Grandense (Varig Airlines)*, 467 U.S. 797 (1984)).

\(^{103}\) *Id.* at 298.

\(^{104}\) *Id.* (quoting *Varig Airlines*, 467 U.S. at 813–14).

\(^{105}\) *Id.*

\(^{106}\) *Id.* at 301.

\(^{107}\) *Id.* at 302 (citing Berkowitz v. United States, 486 U.S. 531, 536 (1988)).


they do not get to the heart of the issue—there are serious flaws in the aircraft certification process that allowed the 737 MAX to fly. These structural failures fall into a few specific categories, each of which can be addressed through legislation or through FTCA claims against the FAA. The JATR report took issue with the FAA’s failures to: (1) designate flight-path-altering changes as “significant” changes, which would have subjected the certification to stricter standards;\(^{110}\) (2) conduct whole aircraft inspection, determining how MCAS would interplay with other systems;\(^{111}\) (3) delegate inspection duty to individuals or entities with MCAS expertise;\(^{112}\) (4) immediately ground the 737 MAX,\(^{113}\) and (5) take steps to ensure the impartiality of delegated safety inspectors with compromising ties to Boeing.\(^{114}\) Two primary issues include: (1) the meaning of “qualified private” individuals under the statute authorizing the FAA to delegate its safety inspection authority; and (2) whether the director of the FAA has full discretion to determine who constitutes a qualified private individual.

A. The FTCA as an Avenue to FAA Accountability

Federal agencies such as the FAA are largely shielded from lawsuits for negligence and other claims under the discretionary function exemption of the FTCA.\(^{115}\) Under the exemption, claims cannot be brought against government employees who, while executing a duty prescribed by statute or regulation, perform a “discretionary function or duty on the part of a federal agency or any employee of the government, whether or not the discretion involved be abused.”\(^{116}\) Since Congress did not define a “discretionary function,” the scope of this exemption has


\(^{111}\) *Id.* at 6.

\(^{112}\) *Id.* at 26.

\(^{113}\) *Id.* at 26.

\(^{114}\) *Id.* at 30.

\(^{115}\) 28 U.S.C. § 2680(a).

\(^{116}\) *Id.*
largely been borne out by judicial decisions. Courts use a generalized two-part test to determine if the exemption applies.\footnote{Berkovitz v. United States, 486 U.S. 531, 536–37 (1988).} First, the Court determines whether the action is discretionary, involving “an element of judgment or choice” in the absence of a law or policy that prescribes a course of action.\footnote{Id.} Second, if the conduct is discretionary, the judgment must be “the kind that the discretionary function exception was designed to shield”—those actions based on policy analysis.\footnote{Id.}

In the case of the 737 MAX certification process, there are three areas where fault may be found and where the discretionary function exemption may apply: (1) the FAA’s delegation of portions of the certification process to Boeing via the FAA’s ODA program;\footnote{Joint Auths. Tech. Rev., supra note 110, at 26.} (2) FAA oversight of the process by the FAA’s Boeing Aviation Safety Oversight Office (BASOO);\footnote{Id. at 9.} and (3) the issuance of the amended type certificate for the 737 MAX with MCAS installed.\footnote{Id. at 819.}

1. Delegation of the Certification Process to Boeing

While it is undisputed that the FAA is allowed to delegate certification authority to private parties and that the ODA program as a whole is a discretionary function,\footnote{United States v. S.A. Empresa de Viacao Aerea Rio Grandense (Varig Airlines), 467 U.S. 797, 807 (1984).} it is worth questioning whether delegating the MCAS certification process falls under the FTCA exemption. In 1984, the Supreme Court faced a similar situation in the Varig Airlines case. Following an accident that killed 124 people involving a Boeing 707 aircraft, plaintiffs tried to file suit against the FAA alleging negligence in “failing to inspect certain elements of aircraft design” before issuing certification. Plaintiffs took specific issue with the “spot-check” FAA review method and the application of that method to the aircraft involved in the case.\footnote{Id. at 819.}

The Supreme Court held the discretionary function exemption shielded the FAA because its decisions about how to conduct its compliance review are discretionary actions “of the most
The FAA was within its statutory rights to consider the resources it has available, decide how to delegate its certification authority, and determine how it would oversee the designee’s inspection process. The statute authorizes the FAA to delegate to a qualified private person a matter related to issuing certificates or examination and testing necessary to issue a certificate. Because the statute does not describe a specific course of action to be taken by the FAA or designee in the certification process, the Court ruled that such a decision was within the discretion of the FAA and the designee. While the Court was correct that the statute’s language is broad and general, Congress set forth a qualification which constrains the delegation: the designee must be a qualified private individual. It is not within the discretion of the FAA to designate an unqualified individual to conduct inspections or certify the aircraft. Here, there are serious concerns about the qualifications of those persons inspecting and certifying MCAS.

Among other concerns, FAA engineers and Boeing employees raised red flags about the lack of qualified engineers available to review changes to the aircraft, including MCAS. In 2005, Congress (in response to industry lobbying efforts) allowed Boeing to choose the engineers who would assist with the FAA’s review and certification process. Some FAA engineers have commented that, over time, this change has led to an inability to monitor what was happening at Boeing. During the 737 MAX’s development, two of the BASOO’s most prominent and experienced engineers—who were responsible for flight control systems including MCAS—resigned and were replaced by an engineer with “little experience in flight controls” and a new hire fresh out of school. “People who worked with the two [new] engineers said they seemed ill-equipped to identify any

125 Id. at 819–20.
126 Id.; see also 49 U.S.C. § 44702(d).
128 Varig Airlines, 467 U.S. at 805.
129 See supra Section III.B.
131 Id.
132 Id.
133 Id.
134 Id.
problems in a complex system like MCAS.”

Furthermore, while the FAA originally retained certification authority over MCAS’s addition, it later delegated that authority to Boeing. With so much authority being delegated to Boeing, it is important to determine whether those involved in the Boeing ODA are qualified private people within the meaning of the statute. Federal regulations outlining the qualifications and duties of ODAs are a good starting point to examine who counts as a qualified private individual. To qualify, an applicant must generally have sufficient facilities, resources, and experience to conduct the duties that have been delegated to them—in this case, certifying the changes made to the aircraft, including MCAS. It is likely well within the FAA’s discretion to determine if the engineers that Boeing would assign to this task are qualified in their engineering capabilities. However, it is the responsibility of the ODA Holder (Boeing) to “[e]nsure that no conflicting non-ODA duties or other interference affects the performance of authorized functions by ODA Unit members.” Accordingly, Boeing has a duty to ensure no undue pressure or influence, such as a race to produce a plane before a competitor, affects the diligence of engineers tasked with certifying the safety of the new systems. It stands to reason that Boeing’s inability to ensure it meets this responsibility could render it unqualified to hold an ODA designation. Therefore, if the FAA knew economic pressures and factors other than plane safety guided Boeing’s directions to its inspecting engineers, then the FAA delegated its certification authority to an unqualified individual, which it cannot do.

There is evidence that, throughout the 737 MAX certification process, Boeing placed profit-motivated pressures on its employees and the FAA. According to the JATR’s findings, “signs were reported of undue pressures on Boeing ODA engineering unit members . . . performing certification activities on the B737 MAX program, which further erodes the level of assurance in this system of delegation.” According to a former Boeing engineer, the company “puts its 737 MAX engineers under immense

135 Jid.
136 JOINT AUTHS. TECH. REV., supra note 110, at 26.
138 Jid. § 183.47(a).
139 Jid. § 183.57(c).
140 See 49 U.S.C. § 44702(d).
141 JOINT AUTHS. TECH. REV., supra note 110, at VII.
pressure to lower production costs and to downplay new features to avoid scrutiny” by the FAA. The engineer said he saw “a lack of sufficient resources to do the job in its entirety.” Given how intertwined Boeing’s officials are with the FAA, it is possible that the FAA was at least aware of the possibility of undue pressure or influence being asserted on the engineers responsible for the certification. Given the evidence of undue pressure and influence, the perceived inability of the Boeing engineers’ ability to complete their safety certification directives, and the qualification requirements of ODA Holders, there is a colorable argument that the FAA’s designation to Boeing of certification authority over MCAS was to an unqualified private individual, which is forbidden by the statute. This could potentially bar the application of the discretionary function exemption and allow families of those killed in the crashes to bring FTCA suits against the FAA.

If the first prong of the Berkovitz test is not met because authority was delegated to private individuals who were not qualified, there is no need to move on to the second prong—the discretionary function exemption does not apply. However, even if the second prong does not need to be satisfied, analysis can still demonstrate the principle that courts strive not to second guess agency policy decisions. A growing body of evidence suggests the delegation in this case was not made on policy grounds, but was instead intended to tilt the scales in Boeing’s race against Airbus. Permitted policy considerations arguably do not include the economic interests of a single airplane manufacturer.

143 Id.
144 See Kitroeff et al., supra note 130.
145 See supra Section III.B.
146 Fishback & Killefer, supra note 87, at 302 (internal citations and quotations omitted).
2. **Improper FAA Oversight and Issuing the Certificate—A Dead End**

The most glaring and well-publicized criticism of the 737 MAX crisis is that there is a significant lack of meaningful FAA oversight over the Boeing ODA program and the 737 MAX certification process.\(^{148}\) Throughout the 737 MAX certification process, the FAA continually delegated more of its oversight responsibility to Boeing.\(^{149}\) Members of the BASOO program in charge of oversight complained they were underqualified and unable to understand the significance of MCAS.\(^{150}\) For example, during an initial project review, an FAA engineer failed to detect that a manufacturer’s certification plan did not demonstrate compliance with specific aviation regulations governing design and construction of aircraft flight controls.\(^{151}\) However, the FAA’s ODA oversight duties are even more generalized and vague, requiring little more than merely overseeing the ODA in unspecified terms.\(^{152}\) The FAA engineers had no explicit duty to review MCAS themselves.\(^{153}\) It is likely within the discretionary function exemption for the FAA to determine what oversight is appropriate and who to place on any oversight committee regarding a specific certification, as the *Varig Airlines* case states.\(^{154}\)

Beyond the *Varig* decision, other circuit courts have reinforced the point that oversight-based allegations of negligence on the part of the FAA are barred by the discretionary function exemption.\(^{155}\) In *Alinsky v. United States*, victims of an aircraft collision tried to sue the FAA under the FTCA, alleging, among other things, that the agency was negligent in contracting out and overseeing the training and appointing of aircraft controllers.\(^{156}\) Explaining that the discretionary function exemption shielded the FAA, the Seventh Circuit stated:

> Here, Congress authorized the FAA to enter into contracts, as necessary, to carry out the functions of the FAA, and thus the

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148 See, e.g., Almond, supra note 86, at 15.
149 Id.
150 Id. at 16.
151 Id. at 15.
153 Id.
155 Alinsky v. United States, 415 F.3d 639, 648 (7th Cir. 2005); Riggs v. Airbus Helicopters, Inc., 939 F.3d 981, 992 n.2 (9th Cir. 2019).
156 Alinsky, 415 F.3d at 647.
government did not violate a specific mandatory statute, regulation or policy in hiring Midwest to provide training and oversight at Meigs. The plaintiffs also fail to identify any mandatory statute or regulation dictating how the FAA must oversee private contractors or assure the contractor complies with federal regulations and the contract provisions. Where the plaintiffs’ claim is premised on negligent oversight, such a showing is imperative.\textsuperscript{157}

Since the FAA made the discretionary decision to contract out the selection, training, and oversight of air traffic controllers in the case, the FAA was not open to attack for oversight failures.\textsuperscript{158}

The \textit{Alinksy} decision is distinguishable from the case of the 737 MAX and may provide a means of attacking the FAA for its failed oversight. \textit{Alinksy} focused on the FAA’s decision to delegate to a third party authority to select and train air traffic controllers.\textsuperscript{159} But here, the FAA retained certain oversight authority, which it vested in the BASOO.\textsuperscript{160}

According to the JATR report, “[t]he BASOO is required to perform a certification function, including making findings of compliance of retained (non-delegated) requirements, while also performing the oversight function of the Boeing ODA. The BASOO must have the resources to carry out these two primary functions without compromise.”\textsuperscript{161} Therefore, the FAA may not have provided enough adequate, qualified individuals to administer its retained oversight over the 737 MAX certification. Some of the engineers involved in the small oversight team were recent graduates and people unfamiliar with MCAS.\textsuperscript{162}

The JATR report found that there were twenty-four engineers on the BASOO team, and that the allocated staffing levels may not have been sufficient to “carry out the work associated with retained items and with the conduct of oversight duties.”\textsuperscript{163} This critical understaffing could have played a part in some key over-sights, including the failure to list the appropriate MCAS correction. Initially, Boeing determined and submitted to the FAA that MCAS limited automated corrections in the airplane’s flight up to 0.6 degrees.\textsuperscript{164} However, the final system design was submit-

\begin{flushleft}
\textsuperscript{157} Id.
\textsuperscript{158} Id. at 648.
\textsuperscript{159} Id.
\textsuperscript{160} \textsc{Joint Auths. Tech. Rev.}, \textit{supra} note 110, at VII.
\textsuperscript{161} Id.
\textsuperscript{162} See Kitroeff et al., \textit{supra} note 130.
\textsuperscript{163} \textsc{Joint Auths. Tech. Rev.}, \textit{supra} note 110, at VII.
\end{flushleft}
ted and reviewed with a 2.5-degree limitation instead of 0.6.\footnote{165}{\textit{Id.}} Boeing decided such a change was insignificant, and so it was never reviewed by FAA oversight engineers, who were unaware of the change until after the crashes.\footnote{166}{\textit{Id.}} Among other factors, this was one of the key causes of the system failure.

Even if Boeing had disclosed this change to the FAA, it is unlikely the change would have been noticed or further examined due to inadequate staffing at the FAA.\footnote{167}{\textit{Id.}} Moreover, while the FAA has discretion to decide how to conduct oversight over its retained functions, that discretion is still bound by statutory limits.\footnote{168}{\textit{Id.}} Thus, if the FAA had a legal duty to provide adequate and qualified supervision of certain aspects of the certification, and the team dedicated to doing so did not have the staff to accomplish it, it could be argued the FAA acted outside of its discretion in allocating its employees. At the same time, however, the FAA’s decisions of how to allocate limited resources are exactly the sort of circumstance that typically invites judicial deference.\footnote{169}{\textit{Id.}}

Other circuit court decisions relating to the policy prong of the FTCA’s discretionary function exemption indicate that, absent clear, specific statutory mandates, the FAA is likely within its rights to consider a wide variety of policy decisions.\footnote{170}{Fishback & Killefer, supra note 87, at 298.} For example, the Second Circuit has held that the government’s use of a chemical agent was discretionary, as were its contracting decisions in performing field tests with that agent.\footnote{171}{\textit{Id.}} at 308 (citing \textit{In re Agent Orange Product Liability Litigation}, 818 F.2d 210, 215 (2d Cir. 1987)). Similarly, the First and Ninth Circuits have held that, once a private contractor is delegated authority to perform some function, the government is not liable for the contractor’s failure to protect its employees from dangers typically within the government’s purview.\footnote{172}{\textit{Id.}} But that discretion is not without limits. A footnote in the \textit{Berkovitz} decision suggests a limitation to the exemption’s

The Court noted that: “While the initial decision to undertake and maintain lighthouse service was a discretionary judgment . . . failure to maintain the lighthouse in good condition subjected the Government to suit under the FTCA [because] the latter course of conduct did not involve any permissible exercise of policy judgment.”

Here, it was within the FAA’s discretion to delegate some certification responsibility to Boeing and to retain some for itself. But once it has decided to retain certain oversight duties, it can only exercise policy judgments that are permissible. Economic considerations, FAA resources, and public safety are all valid, permissible policy considerations that should not be subject to judicial scrutiny. However, it is questionable whether the FAA’s consideration of Boeing’s desire to meet deadlines and compete with Airbus is a permissible consideration, and there is evidence that those interests were considered when the FAA was deciding who would conduct the oversight. “A former FAA safety engineer who was directly involved in certifying the MAX [8] said that halfway through the certification process, ‘we were asked by management to re-evaluate what would be delegated. Management thought we had retained too much at the FAA.’” In a troubling episode, a senior Boeing engineer, whose job was to act on behalf of the FAA in issuing certifications, pushed back against Boeing management’s demands for less stringent testing of a feature by the new engineers. After initially rejecting the engineer’s call for stricter safety testing so that he could comply with FAA regulations, Boeing management eventually caved to his requests. But “[l]ess than a month after his peers had backed him, Boeing abruptly removed him from the program even before conducting the testing he’d advocated.” This incident highlights a consistent

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173 Id. at 303.
174 Id. (citing Berkovitz v. United States, 486 U.S. 531, 538 n.3 (1988)).
175 Borfıt, supra note 77.
176 See Berkovitz, 486 U.S. at 538 n.3.
177 See Fishback & Killefer, supra note 87, at 297.
178 Gates, supra note 164.
179 Id.
181 Id.
182 Id.
problem with the Boeing ODA program: “Many engineers, employed by Boeing while officially designated to be the FAA’s eyes and ears, faced heavy pressure from Boeing managers to limit safety analysis and testing so the company could meet its schedule and keep down costs.”\footnote{183} Boeing’s costs and schedules are not likely the type of policy considerations envisioned by the Berkovitz Court.\footnote{184} However, in the absence of strict, expressly delineated statutory processes that the FAA is bound to follow in designating oversight authority, this mode of attack is probably weaker than one based on the qualified private person grounds.\footnote{185}

3. Is the Federal Tort Claims Act the Right Tool?

Even if it is possible to sue the FAA under the FTCA, a question remains regarding the likelihood that private FTCA suits against the FAA would be effective in ensuring the FAA is not beholden to private companies, like Boeing, and that the FAA performs its duty of ensuring the safety of aircraft without undue private influence.\footnote{186} It has been noted that the FTCA makes it hard to sue the FAA for negligence and that it would be more prudent to sue Boeing directly.\footnote{187} As one aviation lawyer remarked, “At the start, middle and end, regardless of the role the FAA played, Boeing, Boeing, and Boeing is responsible for the safety of the airplane.”\footnote{188} Some feel that the role of investigating the nature of the relationship between the FAA and Boeing is a task better left to the legislature.\footnote{189} After all, victims who want to be made whole can always sue Boeing, which has agreed to settlements of over $1 million for some crash victims.\footnote{190} However, if the FAA is susceptible to “capture,” or is already captured, lawsuits against one of the biggest companies in the industry may help, but would not address the root of the problem. Thus, two

\footnote{183} Id.
\footnote{184} See Berkovitz v. United States, 486 U.S. 531, 538 n.3 (1988).
\footnote{185} See id. at 547.
\footnote{188} Id.
\footnote{189} Id.
\footnote{190} See Boeing Settles First Lawsuit With 737 Max Crash Families, supra note 109.
questions must be addressed; is the FAA “captured”, and if it is, could lawsuits pursuant to the FTCA help?

**B. AGENCY CAPTURE AND THE FAA**

Regulatory agencies, such as the FAA, face the Herculean task of overseeing a technological domain that seems to constantly increase in complexity. With limited resources and personnel, agency cooperation with industry leaders, who often have vastly superior resources and technical expertise, is an inescapable reality. But occasionally, the interests of the private parties subject to regulation become so intertwined with the agency that they lead to undue control and domination of the agency’s regulatory authority. This phenomenon is referred to as agency “capture” and has “been all but universally seen as a negative consequence.”

Agency capture occurs when a private company, through lobbying or otherwise, usurps the agency’s public policy considerations in favor of the private company’s own selfish interests. “It has become widely accepted, not only by public interest lawyers, but by academic critics, legislators, judges, and even by some agency members, that the cooperative over-representation of regulated or client interests in the process of agency decision results in a persistent policy bias in favor if these interests.”

The FAA is an agency that is widely considered “captured” by the airline industry. This conclusion is supported by findings of various investigations into the 737 MAX certification program. A *New York Times* report found that many top agency officials “shuffle[ ] between the government and the industry.” Boeing was treated more as a client than as a private party regulated by the FAA. Managers within the FAA’s oversight program over the Boeing ODA were reportedly pressured to make sure Boeing met deadlines to deliver the 737 MAX to its customers.

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191 See Niles, *supra* note 55, at 393.
192 *Id.* at 390.
193 *Id.*
194 *Id.*
195 See *id.* at 405.
196 Kitroeff et al., *supra* note 130.
197 *Id.*
198 *Id.*
Certification were not reported to disinterested FAA officials, but to Boeing executives.\footnote{199}\footnote{Joint Auths. Tech. Rev., supra note 110, at 29.}

Concerns about the impartiality of the FAA and fears of its capture by the industry are not new or unique to the aviation industry. The rise of the administrative state has naturally led to an increased number of agencies, and thus increased concern over agency capture.\footnote{200} For the FAA in particular, a primary source of concern stems from what has been referred to as the FAA’s dual mandate—beyond just regulating airline safety, the FAA is also tasked with fostering air commerce.\footnote{201} “[T]he FAA was given the difficult task of balancing two interests which might be frequently, if not inherently, in conflict: the protection of airline safety on one hand, and the ‘fostering’ of successful air commerce, and consequently, the promotion of airline profitability, on the other.”\footnote{202}

While that language was removed in subsequent amendments to the statute, the influence of the dual mandate remains.\footnote{203} While other industries do rely on “audited self-regulation” by private companies, the FAA is particularly susceptible to “hyper-influence” by regulated parties since it “relies almost exclusively on self-regulation.”\footnote{204} Given that concerns about the influence of the aviation industry on the FAA stretch back over forty years and that the prevalence of companies like Boeing in the FAA certification process has only increased in that time,\footnote{205} it seems that the legislature and the agency itself may not be capable of crafting solutions to the problem. A critical examination of some of the proposed changes and findings by the JATR reveals why FTCA suits are a necessary aspect of FAA reform.

In its report on the FAA’s delegation of certification authority to Boeing, the JATR panel concluded that “in the [737] MAX program, the FAA had inadequate awareness of MCAS function which, coupled with limited involvement, resulted in the inability of the FAA to provide an independent assessment of the adequacy of the Boeing proposed certification activities associated with MCAS.”\footnote{206} This statement alone is rather shocking. The fact

\begin{footnotes}
\footnote{200} Niles, supra note 55, at 386–88.
\footnote{201} Id. at 407.
\footnote{202} Id.
\footnote{203} Id. at 408.
\footnote{204} Id. at 413.
\footnote{205} Id. at 409.
\footnote{206} Joint Auths. Tech. Rev., supra note 110, at VII.
\end{footnotes}
that the FAA was willing to certify the 737 MAX even though it could not determine the adequacy of Boeing’s certification activities indicates a disturbing level of incompetence or industry influence—or both—within the FAA. To remedy this, the panel issued Recommendation R5, “that the FAA conduct a workforce review of the BASOO engineer staffing level to ensure there is a sufficient number of experienced specialists to adequately perform certification and oversight duties, commensurate with the extent of work being performed by Boeing.”

However, given the Court’s broad understanding of the discretionary function exemption, the FAA could likely meet this duty by simply stating that current staffing levels are adequate—it would be acting within its discretion in making that determination. Even if the statute were amended to require “adequate” staffing, it would still be up to the FAA (and by extension, Boeing) to determine what that means.

The JATR also recommended that “[t]he FAA should review the Boeing ODA work environment and ODA manual to ensure the Boeing ODA engineering unit members are working without any undue pressure when they are making decisions on behalf of the FAA.” This would amount to having FAA officials connected with Boeing determine whether Boeing is exerting undue pressure on the engineers, and given the broad scope of the discretionary function exemption, Boeing officials delegated authority would have the discretion to conclude the engineers operate free of undue pressure. Other JATR recommendations involve requiring “holistic, integrated aircraft-level approach[es]” to certification—that ODA engineers consider how adding critical technological systems like MCAS might effect other processes of the aircraft.

These recommendations seem so obvious that it is hard to believe they have not been considered by the FAA, fortifying contentions that the agency is subject to industry control, which will only be loosened by bringing FTCA claims against it.

For a captured agency like the FAA, there is very little standing in the way of allowing the industry to apply undue pressure absent judicial intervention. The lobbying groups behind the airline industry are considered some of the most powerful and

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207 Id. at VIII.
208 Id.
209 Id.
210 Id. at VIII–IX.
effective in the United States. The FAA is largely run by people with significant connections to the major airlines, and who seem to side increasingly with the industry on issues.\(^{211}\) Unfortunately, the only catalyst for any semblance of change in the FAA tends to be the public outcry following devastating accidents that cost hundreds of lives.\(^{212}\) But these incidents are few and far between and changes are typically not implemented once the outrage subsides. For example, in response to a catastrophic crash of an airplane off the coast of Long Island in the late 1990s, the “FAA implemented several heightened safety measures and organized a White House Commission on Aviation Safety and Security.”\(^{213}\) This commission, among other things, proposed thirty-one recommendations for tightening airport security, especially in the face of terrorism.\(^{214}\) But those procedures were not seriously implemented by the FAA until after the September 11, 2001 terrorist attack.\(^{215}\) Most observers agreed that “had those recommendations been implemented within the spirit and intent of the commission, the plans to attack on September 11 might have been detected well before they occurred.”\(^{216}\) Allowing FTCA suits to proceed against the FAA for acts outside the scope of the discretionary function exemption would place the FAA on notice that it should conduct its duties in accordance with one of its primary purposes—to promote safety.

V. CONCLUSION

In the absence of congressional action amending legislation to implement oversight requirements and limits on delegation, the FAA might not curb its own excesses. A slew of small, but specific amendments could go some way to creating meaningful change.

First, the statute should require that an impartial FAA engineer have a non-delegable duty to conduct a cursory examination of a proposed change and make the initial determination of whether it is considered significant or minor. In the case of the 737 MAX, the JATR concluded that it was Boeing engineers, likely under pressure from Boeing management, who made the determination that a change in MCAS that increased the ability

\(^{211}\) Niles, supra note 55, at 415.
\(^{212}\) Id. at 409.
\(^{213}\) Id.
\(^{214}\) Id. at 410.
\(^{215}\) Id. at 410–11.
\(^{216}\) Id.
of the system to change the pitch of the aircraft was not significant and did not need further FAA review. Had the FAA oversight engineers seen the change, they could have caught the mistakes that caused the accidents.

Along those lines, the statute should mandate that any automated system that can alter the flight path of an aircraft without input from the pilot is, by definition, a significant change that needs to be reviewed independently by FAA engineers. Given the stakes involved, it makes no sense that a change which can alter the flight of the aircraft without input could be seen as anything other than significant. Finally, amending the statute to require the FAA to retain authority to appoint specific Boeing engineers who will participate in the ODA program, rather than delegating that duty to Boeing, is another solution to part of the problem.

But in the face of Congress’ inaction, the judicial system provides hope of holding the FAA accountable when delegating authority to private industry leaders like Boeing.

218 Id. at 14.
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