IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

SYLVIE LAMARCHE LACROIX, Individually and as Estate Trustee of the Estate of STÉPHANIE LACROIX, Deceased, *Plaintiff,* *v.* THE BOEING COMPANY, and ROSEMOUNT AEROSPACE, INC., *Defendants.*	)	No. **PLAINTIFF'S COMPLAINT AND JURY TRIAL DEMAND**

COMPLAINT

Plaintiff, **SYLVIE LAMARCHE LACROIX**, Individually and as Estate Trustee of the Estate of **STÉPHANIE LACROIX**, Deceased, by her attorneys, brings this action for damages on behalf of herself and on behalf of **STÉPHANIE LACROIX**, her estate, heirs, survivors, next of kin and wrongful beneficiaries against Defendants **THE BOEING COMPANY ("BOEING")** and **ROSEMOUNT AEROSPACE, INC. ("ROSEMOUNT")** as follows:

I. INTRODUCTION

1. This action arises from the horrific crash of Ethiopian Airlines Flight 302 ("Flight 302") on March 10, 2019 in which all 157 people on board lost their lives. The aircraft involved in Flight 302 was a **BOEING** 737 MAX 8. This crash came less than five months after Lion Air Flight JT 610—another **BOEING** 737 MAX 8—crashed into the Java Sea on October 29, 2018, killing all 189 onboard, due to the same or similar causes.

2. Investigation into both crashes is ongoing, but the similarities in the aircraft and the

investigative findings for the crashes thus far point to a common cause. Shortly after taking off and while attempting to climb, pilots for both aircraft reported flight control issues as the planes pitched up and down erratically throughout the sky. The flight paths and data released thus far for both aircraft show that the pilots were engaged in a terrifying tug-of-war with the plane's automated flight-control systems as the pilots manually tried to climb while the computer system repeatedly caused the plane to dive with increasing nose-down trim against the pilot inputs. Pilots of both Flight 302 and Flight 610 lost their fight with **BOEING's** flight computer and hundreds of passengers and crew lost their lives due to **BOEING's** flight computer driving the airplanes into the ground.

The Wreckage of Ethiopian Airlines Flight 302

3. **BOEING** installed the defective flight control system that appears to be the cause of both crashes to address changes in the aircraft's handling caused by the 737 MAX 8 aircraft's

larger and more fuel-efficient engines. Both the design changes and the unsafe way in which **BOEING** designed and certified the flight control system were done to make the 737 MAX 8 aircraft more competitive against rivals like the Airbus A320, and in turn to increase **BOEING's** sales and profits.

4. Driven by greed, **BOEING** haphazardly rushed the 737 MAX 8 to market, and actively concealed the nature of the automated system defects with the knowledge and tacit approval of the United States Federal Aviation Administration ("FAA"). Numerous decisions by **BOEING's** leadership substantially contributed to the subject crash and demonstrate **BOEING's** conscious disregard for the lives of others, including **BOEING's** role in: designing an aircraft with a powerful automated flight control system susceptible to catastrophic failure in the event of a single defective sensor; failing to properly inform pilots of the existence of the new flight control system and train them in its operation; failing to provide essential information about the new system in the aircraft's flight manual; refusing to include key safety features as standard in the aircraft rather than optional upgrades; delivering 737 MAX 8 aircraft with a version of the flight control system that was materially different from the version presented to the FAA during certification; and failing to take appropriate action after **BOEING** learned that the 737 MAX 8 aircraft was not performing as intended or safely.

5. **BOEING's** willful and wanton conduct and utter disregard for passenger safety were further made tragically clear when **BOEING** executives refused to ground the plane, fix the defects, or even accurately warn pilots and the public after the crash of Lion Air Flight JT 610. **BOEING** executives in Chicago simply chose to protect their bottom line rather than to protect the public and thus killed the 157 people who never should have died on Ethiopian Airlines Flight 302 on March 10, 2019.

6. **BOEING's** decision to put profits over safety is further evident in **BOEING's** repeated false claims that the 737 MAX 8 is so similar to its earlier models that it does not require significant retraining for those pilots familiar with the older generation of 737s. **BOEING** insisted that retraining is not required, even after Lion Air Flight 610 crashed, because airlines would buy fewer **BOEING** aircraft if pilots needed to be retrained. In so doing, **BOEING** risked people's lives merely to improve its bottom line and must pay punitive damages to punish and deter **BOEING**, and others, from doing so again.

7. Defendant **ROSEMOUNT** tested and falsely warranted the safety of the faulty sensor that caused the Ethiopian Airlines Flight 302 crash.

8. In addition, the FAA approved and/or certified **BOEING's** design for its new aircraft despite its substantial flaws because the FAA had negligently hired and/or trained its employees and it knew or should have known that its employees were unfit to perform their job duties and responsibilities, including implementing and executing inspections and testing of the 737 MAX 8, and that a catastrophic plane crash was a foreseeable consequence. Further, after the initial Lion Air Flight 610 crash, the FAA negligently, recklessly, and/or unlawfully provided incomplete and inadequate warnings to pilots, passengers and the public that severely understated the serious known safety risks associated with continued flight of the 737 MAX 8. Moreover, it characterized FAA Airworthiness Directive as a "non-emergency" that would address and fix the known problem, all of which **STÉPHANIE** and other passengers on Ethiopian Airlines Flight 302 relied on to their detriment, being duped into a false sense of security about flying on a 737 MAX 8. Sadly, these two entirely preventable airline crashes demonstrate that the FAA is ill-equipped to oversee the aerospace industry and will downplay serious hazards and safety risks to the public rather than sound the alarm about safety concerns, problems and hazards that pose substantial,

probable and/or foreseeable risks to human life. **BOEING** and the regulators that enabled it must be held accountable for their reckless actions.[1]

II. JURISDICTION AND VENUE

9. This Court has subject matter jurisdiction of this case pursuant to 28 U.S.C. § 1331(a) in that this matter arises under the laws and treaties ratified by the United States, including but not limited to the Convention for the Unification of Certain Rules for International Carriage by Air ("Montreal Convention"). This flight involves the international carriage of passengers between Ethiopia and Kenya, both of whom are signatories to the Montreal Convention, which specifically removes limitations on damages.

10. The Court also has subject matter jurisdiction of this dispute pursuant to 28 U.S.C. § 1332 as this case involves a dispute between PLAINTIFF/**STÉPHANIE**, Canadian citizens domiciled in Ontario, and defendants **BOEING**, a Delaware corporation with its principal place of business in Chicago, Illinois and **ROSEMOUNT**, a Delaware corporation with its principal place of business located in Burnsville, Minnesota. The amount in controversy exceeds the jurisdictional minimum of this Court.

11. Venue is proper in this District pursuant to 28 U.S.C. § 1391 because defendant **BOEING** is a resident of this District and a substantial part of the events or omissions giving rise to the claim occurred in this District. Key decisions were made by **BOEING's** corporate leadership in Chicago, including those decisions regarding the development of the 737 MAX 8, certification of the aircraft, disclosures to airlines and **BOEING's** actions and response in the wake of the Lion Air Flight JT 610 crash.

[1] **PLAINTIFF** also intends to assert claims against the FAA under the Federal Tort Claims Act, 28 U.S.C. §2674 in compliance with 28 U.S.C. §2675. **PLAINTIFF's** claims against the FAA arose out of the agency's negligence in improperly certifying the 737 MAX 8.

III. THE PARTIES

A. PLAINTIFF

12. Decedent **STÉPHANIE LACROIX ("STÉPHANIE")** was a passenger on board Flight 302 when it crashed on March 10, 2019. **STÉPHANIE** is survived by her mother **SYLVIE LAMARCHE LACROIX**, her father **ALAIN LACROIX** and sister, **DOMINIQUE LACROIX**. **SYLVIE LAMARCHE LACROIX** is the Estate Trustee of the Estate of **STÉPHANIE LACROIX** and brings this action individually and on behalf of **STÉPHANIE** and on behalf of her estate, heirs, survivors, beneficiaries, next of kin, **SYLVIE LAMARCHE LACROIX** as surviving mother, **ALAIN LACROIX** as surviving father and **DOMINIQUE LACROIX** as surviving sister. Both **STÉPHANIE** and **PLAINTIFF** are/were citizens of Canada with their principal and permanent residence in the Province of Ontario.

13. **STÉPHANIE LACROIX** was a citizen of Ontario, Canada who, at a young age, had already dedicated her life to helping less fortunate people around the world. When not traveling to pursue her humanitarian work, she loved coming home to her native Timmins, Ontario to spend quality time with her family. **STÉPHANIE** learned the value of hard work and educational efforts at an early age. She was selected to give the valedictorian speech at her graduation from the International Development and Globalization program at the University of Ottawa in 2015. **STÉPHANIE** received a Bachelor of Social Science Honours degree and a bilingual diploma (French, English). **STÉPHANIE** was actively involved in campus activities at the University of Ottawa, as a community advisor, a summer orientation guide and a residence coordinator. **STÉPHANIE's** passion for social justice and international development led her to volunteer with the Projet Amour Communautaire in Timmins and Jamaica, and intern with the World University Services of Canada in Botswana and Malawi, as well as with the United Nations in Zimbabwe.

STÉPHANIE worked to empower youth, giving them opportunities to strive in their environment, including helping design a new English program, piloting the first Living Learning Community at University of Ottawa and promoting and developing life skills and social programs. **STÉPHANIE** was a devoted daughter and sister and her family has suffered and continues to suffer a terrible loss, compounded by the circumstances of the crash and how easily the defendants could have prevented it from occurring. At the time of the crash of Ethiopian Airlines Flight 302, **STÉPHANIE** was working as a project officer for UNA-Canada Service Corps. In connection with that role, she was on Ethiopian Airlines Flight 302, leading a youth delegation to a conference of the United Nations Environment Assembly being held in Nairobi, Kenya. **STÉPHANIE** died carrying out the good works she had devoted her adult life to.

STÉPHANIE

B. DEFENDANTS

14. Defendant **BOEING** is a Delaware corporation with a principal place of business in Chicago, Illinois. The global **BOEING** headquarters and corporate leaders are all based in Chicago. **BOEING** manufactures the 737 MAX 8 jets, including the one that crashed in Ethiopian Airlines Flight 302, as well as the one involved in the prior Lion Air Flight JT 610 crash.

BOEING, as deputized by the FAA, also made key certification decisions about the 737 MAX 8.

15. Defendant **ROSEMOUNT** is a Delaware corporation with its principal place of business located in Burnsville, Minnesota, and is in the business of designing, manufacturing and selling aerospace components for use in commercial airplanes, including the faulty AOA sensors used in the **BOEING** 737 MAX 8 aircraft. **ROSEMOUNT** transacts regular and substantial business with Chicago-based **BOEING** in Cook County, Illinois.

IV. STATEMENT OF FACTS

A. BOEING RUSHED THE 737 MAX 8 TO PRODUCTION

16. **BOEING's** main competitor in the commercial aviation industry is Airbus SE ("Airbus"). Airbus has been increasing its market share for decades and eating into **BOEING's** sales. When Airbus launched its more fuel-efficient airliner, the A320neo, **BOEING** initially dismissed its anticipated appeal to airlines. The chief executive of **BOEING's** commercial airplanes division, James F. Albaugh, told employees at a meeting in January 2011 that Airbus' decision to fit its existing aircraft with larger engines would be "a design change that will ripple through the airplane" and present significant challenges for Airbus. In other words, **BOEING's** CEO predicted that the new engine would in turn require more design changes in the Airbus plane, exactly what **BOEING** was to encounter.

17. **BOEING's** tune changed when it learned that some of its key customers, including American Airlines, would be placing orders with Airbus for their fuel-efficient A320 neo aircraft. This ratcheted up the financial pressure on **BOEING** to respond. Since the design of an entirely new jet would take too long, **BOEING** decided to create a more fuel-efficient alternative to its traditional 737NG aircraft - what would become the 737 MAX 8.

18. According to a former senior **BOEING** official, **BOEING** opted to build the 737

MAX 8, rather than an entirely new aircraft, because it would be "far quicker, easier and cheaper than starting from scratch, and would provide almost as much fuel savings for airlines."[2]

19. In August 2011, **BOEING** launched the 737 MAX family of aircraft, a new iteration of the widely-used 737NG. In designing the 737 MAX 8, it was vital to **BOEING's** leadership that it could certify and market the aircraft as simply an upgrade to its already certified 737NG so that **BOEING** could obtain regulatory approval from the FAA for pilots to operate the 737 MAX 8 aircraft without extensive simulation time or retraining.

20. On information and belief, the decisions to design an aircraft that would obtain certification from the FAA without the need for pilot retraining, and to set an unrealistic timeline for completion of the 737 MAX 8, were made by **BOEING** corporate leadership at its headquarters in Chicago.

21. Rick Ludtke, an employee at **BOEING** for 19 years and an engineer who helped design the 737 MAX 8 cockpit, explained that **BOEING** directed its engineers that "[a]ny designs we created could not drive any new training that required a simulator." This created a chaotic environment for engineers designing the 737 MAX 8. As Ludtke described: "The company was trying to avoid costs and trying to contain the level of change. They wanted the minimum change to simplify the training differences, minimum change to reduce costs, and to get it done quickly."[3]

22. The need to minimize design changes served an important business need for **BOEING**. If airline pilots did not require costly and time-consuming training in the new aircraft it would make the 737 MAX 8 cheaper for airlines to operate. This in turn would make the price for the 737 MAX 8 more competitive relative to the Airbus A320neo and far more profitable for

[2] New York Times, "Boeing 737 Max: A jet born of a frantic race to outdo a rival," by David Gelles, Natalie Kitroeff, Jack Nicas, Rebecca Ruiz, March 24, 2019.
[3] Id.

BOEING.

23. Thus, **BOEING** needed the 737 MAX 8 aircraft to be both more fuel efficient and to handle similarly to the 737NG to get FAA certification and sell. The 737 MAX 8 aircraft was able to achieve this new fuel efficiency, in part, due to the model's larger CFM LEAP-1B Engine. However, adding the larger engines triggered cascading design and engineering changes for the aircraft, the same ripple of changes that James Albaugh, **BOEING's** commercial airplanes chief executive, had predicted back in 2011 when criticizing Airbus' A320neo.

24. The larger engines could not be mounted in the same location as the engines on the 737NG so they had to be moved farther forward on the plane, which in turn required moving the landing gear forward. The more powerful engines, coupled with their new location, caused the 737 MAX 8 to handle differently from the 737NG by changing the plane's lift characteristics. A 737NG pilot operating the 737 MAX 8 would find that the 737 MAX 8 would ascend faster and at a higher angle, increasing the risk of a stall.

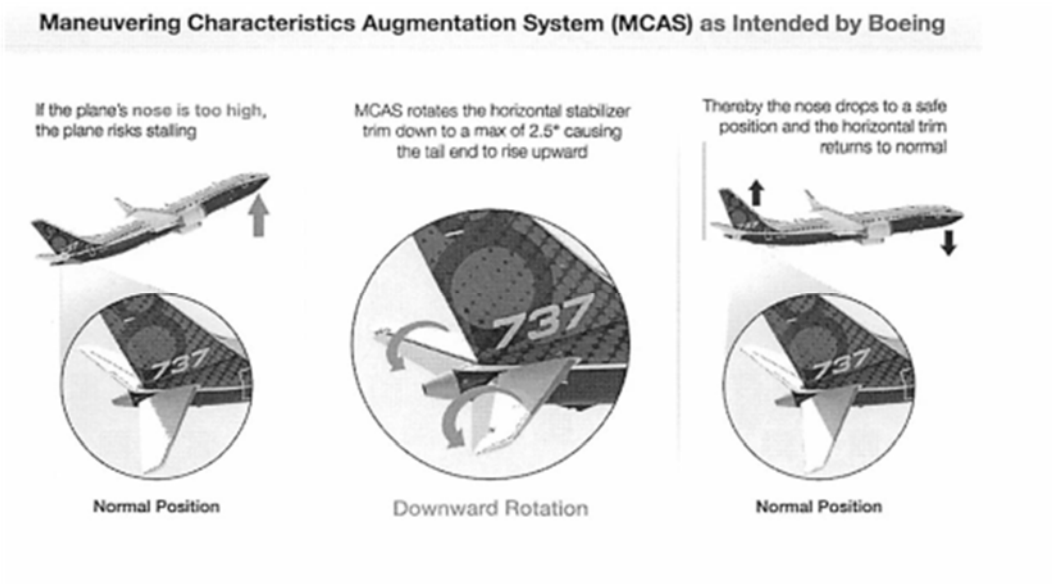
25. As **BOEING's** business leaders required engineers to contain the level of change to avoid pilot retraining and make the 737 MAX 8 more marketable, **BOEING** now needed to engineer a band-aid to fix the aircraft's handling issues created by the larger and more powerful engines.

B. BOEING INTRODUCED A SECRET FLIGHT CONTROL SYSTEM WHICH ADDRESSED ONE PROBLEM BUT CREATED ANOTHER DEADLY ONE

26. To address this risk of a stall and to make the plane handle like prior models of the 737, **BOEING** included a new automated flight-control system in the 737 MAX 8 aircraft called the Maneuvering Characteristics Augmentation System ("MCAS").

27. The MCAS collected data from a single sensor on the fuselage called the angle-of-

attack sensor ("AOA sensor"), which measures the angle between the wing of the plane and the oncoming airflow at the front of the plane. If the AOA sensor registers that the angle is too high—that the plane is climbing too sharply—then the MCAS activates, automatically lifting the tail of the plane to move the plane's nose down, as can be seen on the following graphic:



28. **ROSEMOUNT** designed and manufactured the AOA sensors installed on the **BOEING** 737 MAX 8, including the sensors installed on Flight 302, and worked with **BOEING** in the development of the **BOEING** 737 MAX 8.

29. Although the 737 MAX 8 has two AOA sensors, the MCAS system used only one of the AOA sensors. The MCAS was not programmed to use data from both AOA sensors to protect against single point failures. This meant that if the single AOA sensor used by MCAS malfunctioned, there was no means of detecting its erroneous data to prevent the MCAS from improperly intervening and forcing the plane to dive.

30. The MCAS was intended to automatically adjust the pitch of the plane to avoid stalling with the 737 MAX 8's more powerful engine. The pilot would not need to manually activate the MCAS nor would the aircraft inform the pilot that the MCAS system was making pitch

changes.

31. Shockingly, since the MCAS was intended to operate in the background without pilot knowledge, **BOEING** did not even inform pilots that the MCAS existed. Likewise, the MCAS was not disclosed in the aircraft's flight manual. Pilots would only discover MCAS, and then indirectly, when the plane began automatically fighting their pitch commands, which would likely occur at low altitudes with dangerously little time to react and resolve the issue.

32. In November 2018, after the Lion Air crash, a **BOEING** executive met with pilots' union representatives. According to pilot Dennis Tajer, who was in attendance, **BOEING** executives tried to excuse their failure to disclose MCAS by explaining that they did not wish to "inundate" pilots with too much information about the new plane.[4] Frustrated, pilot unions have described **BOEING's** actions in failing to disclose the software as a "break of trust."[5]

C. THE FAA FAILED TO PROPERLY HIRE AND TRAIN ADEQUATE TECHNICAL STAFF TO COMPETENTLY PERFORM AND FULFILL ITS INSPECTION AND TESTING OBLIGATIONS

33. The FAA was so under-resourced and ill-equipped to evaluate the 737 MAX 8's features that the FAA relied heavily on **BOEING** to validate the safety of its own aircraft. In 2005, the FAA adopted the Organization Designation Authorization, allowing **BOEING** to designate its own employees to approve design work on the FAA's behalf.

34. In this delegation of responsibility by the FAA to **BOEING,** the Department of Transportation auditors found in 2012 that the FAA had not done enough to "hold Boeing accountable," presumably because FAA employees were ill-equipped, under-qualified and/or insufficiently trained to actually perform this necessary job function and responsibility. A later

[4] New York Times, "After 2 Crashes of New Boeing Jet, Pilot Training Now a Focus" by Kitroeff, Gelles, Nicas, Kaplan and Huberman, https://www.nytimes.com/2019/03/16/business/boeing-max-flight-simulator-ethiopia-lion-air.html, March 16, 2019.
[5] Id.

2015 report from the Department of Transportation's inspector general likewise faulted the FAA for lacking "an effective staffing model" and "risk-based oversight process."[6]

35. Further, FAA employees reported poor morale and disagreement relating to the FAA's treatment of **BOEING** and fear of retaliation if they spoke up.[7]

36. As it was ceding more and more of its regulatory authority to **BOEING**, the FAA conducted its certification of the 737 MAX 8, which occurred on March 9, 2017. However, due to the under-qualified and insufficiently trained nature of the FAA staff, the certification process proceeded slower than **BOEING** desired and FAA technical experts reported receiving pressure from management to speed up the certification process because the development of the 737 MAX 8 was nine months behind Airbus' A320neo.[8] The FAA did not provide its own staff the time, training, resources and/or the proper tools to carefully scrutinize the safety of the 737 MAX 8. The FAA also knew or should have known the serious safety risks it ran by failing to retain qualified and properly equipped staff and failing to properly train its staff to perform competently.

37. Management at the FAA knew that its technical staff was ill-equipped, under-qualified and/or insufficiently trained to handle inspections and testing of the 737 MAX 8 because the FAA recognized that it had "retained too much" work internally. FAA management pressured FAA safety engineers to delegate more to **BOEING** relating to certification of the 737 MAX 8. A former FAA safety engineer who was directly involved in certifying the 737 MAX 8, stated 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."[9]

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[6] Id.
[7] Bloomberg News, "Boeing Had Too Much Sway in Vetting Own Jets, FAA was Told," by Peter Rubino and Alan Levin, https://www/bloomberg.com/news/articles/2019-01-18/boeing-had-too-much-swan-checking-own-planes-faa-workers-warned, March 18, 2019.
[8] Id.
[9] Seattle Times, "Boeing Aerospace Failed Certification FAA Missed Safety Issues in the 737 Max System Implicated in the Lion Air Crash," https://www/seattletimes.com/business/boeing-aerospace-failed-certification-faa-

38. While more and more work was delegated by the FAA to **BOEING** to evaluate itself, the work that was retained by the FAA also was not done properly because the FAA technical staff was ill-equipped, under-qualified and/or insufficiently trained. The same former FAA engineer stated "[t]here wasn't a complete and proper review of the documents" for the 737 MAX 8 certifications.[10] As **BOEING** was running out of time to deliver the 737 MAX 8 to airlines, FAA managers would even sign off on documents themselves without waiting for the FAA technical staff to complete their review.

39. Therefore, the FAA approved and/or certified **BOEING's** design, production and/or manufacturing for its new aircraft despite its substantial flaws because, in addition to ceding much of its oversight function to **BOEING** itself, the FAA had negligently hired and/or trained its employees and it knew or should have known that its employees were unfit to perform and/or could not competently perform their job duties and responsibilities, including implementing and executing inspections and testing of the 737 MAX 8 and that a catastrophic plane crash would foreseeably result.

D. BOEING'S LEADERSHIP CREATED A CULTURE PUTTING PROFITS OVER SAFETY

40. In the mad rush to get the 737 MAX 8 certified and orders filled to airlines, **BOEING** leadership placed enormous pressure on its engineers and vendor **ROSEMOUNT** to produce a finished product. Several of the engineers and designers working on the 737 MAX 8 described this frantic pace of the 737 MAX 8's development:

a. An engineer working on the 737 MAX 8 said that "[t]he timeline was extremely compressed . . . It was go, go, go."[11]

missed-safety-issues-in-the-737-max-system-implicated-in-the-lion-air-crash, March 21, 2019.

[10] Id.

[11] New York Times, "Boeing 737 Max: A jet born of a frantic race to outdo a rival," by David Gelles, Natalie

b. A former designer working on the 737 MAX 8's flight controls described how the design team had at times produced 16 technical drawings a week, double the normal rate. The designer understood the message from management to be: "We need something now."[12]

c. A technician who assembled wiring on the 737 MAX 8 said that he received sloppy blueprints in the first few months of development and was told that the instructions for the wiring would be cleaned up later in the process. However, his internal assembly designs for the 737 MAX 8 apparently still include omissions today, such as not specifying which tools to use to install a certain wire, a situation that could lead to a faulty connection. This is quite different from standard procedures because normally such blueprints include intricate instructions.[13]

41. Upon information and belief, the unreasonable expectations placed on engineers, designers and vendor **ROSEMOUNT** by the **BOEING** corporate business leadership centered in Chicago created an environment at **BOEING's** facilities ripe for mistakes and within which employees and vendors were reluctant to raise concerns that may delay certification and production of the 737 MAX 8.

42. A lawsuit filed in South Carolina on March 16, 2019 by a former **BOEING** Quality Assurance Conformity Manager further calls into question the integrity of **BOEING's** testing and inspection procedures. This manager was tasked with inspecting all newly-manufactured aircraft for compliance with internal engineering and safety specifications. Each incidence of non-conformity that **BOEING** inspectors encounter is supposed to be documented by **BOEING** as

Kitroeff, Jack Nicas, Rebecca R. Ruiz, March 24, 2019.
[12] Id.
[13] Id.

well as all repairs and subsequent inspections.

43. According to the manager's complaint, at one of **BOEING's** manufacturing plants, **BOEING** agents and/or employees engaged in improper conduct including:

a. "goldplating," which is repeating a test until it is successful and then having the records show that the test was successful on the first attempt;

b. knowingly using out of date engineering specifications;

c. knowingly using uncertified technicians to perform maintenance and repairs;

d. violating internal **BOEING** policy and procedures to achieve final approval of each stage of production and make the plane immediately saleable;

e. disabling the automated system that notified all pertinent employees of mandatory inspections of newly manufactured aircraft; and

f. submitting conformities without documented repairs.

44. The manager also alleges that when he tried to document non-conforming aircraft equipment, he was threatened, retaliated against, subjected to a hostile work environment and eventually terminated.

45. On information and belief, this manager's allegations relating to violations of safety standards, falsified inspection records and an environment of distrust and retaliation are representative of wrongful conduct and violation of safety protocols at other **BOEING** manufacturing facilities. Plaintiff further alleges that these issues were known, encouraged and/or ratified by **BOEING's** leadership and contributed to a culture that suppressed voices raising alarm about safety in furtherance of **BOEING's** profit-driven focus.

E. BOEING CONDUCTED A FLAWED SAFETY ASSESSMENT OF THE MCAS AND FALSIFIED DATA TO THE FAA

46. In addition to the questions about **BOEING's** design and manufacturing procedures

at the time the 737 MAX 8 was undergoing design and certification, the protocols for **BOEING's** safety assessment of the deadly MCAS also showed glaring errors.

47. The flawed MCAS was designed to swivel the horizontal tail to push the nose of the plane down to avert a stall. **BOEING** tested this system, but then lied in its safety analysis about the power of the MCAS system.

48. **BOEING** submitted documentation to the FAA indicating that the MCAS could only move the horizontal tail a maximum of 0.6 degrees. However, when the 737 MAX 8 was put into service, the MCAS was capable of moving the tail 2.5 degrees, more than four times the 0.6 degrees stated in the initial safety analysis provided to the FAA. The version of the MCAS that **BOEING** embedded in its aircraft and sold all over the world was materially different and far more powerful than what **BOEING** represented to the FAA and other regulatory agencies. The FAA did not learn that the MCAS would move the horizontal tail 2.5 degrees until after 189 people were killed in the Lion Air crash.

49. **BOEING's** safety analysis also failed to account for how the MCAS could reset itself after each time a pilot responded. This meant that a malfunctioning MCAS would not just cause a single downward movement of 2.5 degrees but could dip the nose of the aircraft 2.5 degrees lower multiple times as the pilot tries to regain control. Without correction, two cycles of the MCAS at the 2.5-degree limit could cause the aircraft to reach its maximum nose-down trim position. Peter Lemme, a former **BOEING** flight controls engineer, stated that since the MCAS can reset each time it is used, "it effectively has unlimited authority."[14]

50. Based on **BOEING's** own flawed statement—that the MCAS' maximum authority

[14] Seattle Times, "Flawed Analysis, Failed Overnight: How Boeing, FAA Certified the Suspect 737 MAX Flight Control System," by Dominic Gates, https://www.seattletimes.com/business/boeing-aerospace/failed-certification-faa-missed-safety-issues-in-the-737-max-system-implicated-in-the-lion-air-crash, March 21, 2019.

was 0.6 degrees—**BOEING's** System Safety Analysis classified an MCAS' failure as a "major failure" in normal flight and a "hazardous failure" in the event of an extreme maneuver, such as a banked descending spiral.[15] A "major failure" classification indicates that the system's failure could cause physical distress to people on the plane, but not death. A "hazardous failure" could cause serious or fatal injuries to a small number of passengers. The appropriate classification would have been the next level above hazardous failure, "catastrophic failure," which represents the loss of the plane with multiple fatalities.

51. The failure classification system is important because it drives whether a flight control system can rely on a single sensor input or must have two or three. Systems with a consequence of failure classified as a "major failure" must have a probability of failure less than one in 100,000. Typically, such systems are allowed to rely on a single input sensor.[16]

52. In contrast, systems classified as "hazardous failure" have more severe consequences of failure and therefore must have a probability of failure less than one in 10 million. Systems classified as "hazardous failure" typically must have at least two separate input channels as a backup in the event one sensor fails.[17]

53. If the MCAS was properly classified as a "hazardous failure," it would have been required to have a redundant back-up system. Instead the deadly MCAS system **BOEING** sold and shipped all over the world could - and on at least two occasions did - trigger fatal crashes with a reading from a single AOA sensor and, once triggered, it had unlimited authority to pitch the nose of the aircraft down.

54. **BOEING** installed a second AOA sensor on every 737 MAX 8, including the plane

[15] Id.
[16] Id.
[17] Id.

the crashed in Ethiopia, which could have been used to provide redundancy and safety, and which **BOEING** is now using in its MCAS software "fix" after these two fatal accidents. **BOEING** chose not to use both sensors initially simply to save time and money. This is the same deadly cost-cutting **BOEING** did when it designed the 737 auto-throttle system that caused the 2009 Turkish Airlines Flight 1591 to crash in Amsterdam on February 25, 2009. **BOEING** relied on a single sensor input instead of two readily available inputs to save a few dollars, resulting in the crash of Turkish Airlines Flight 1591. After the Turkish Airways crash, **BOEING** quickly issued a software fix to prevent recurrence. **BOEING** should have learned from that 2009 accident to never try to save a few dollars by relying on a single sensor for critical systems, yet once again **BOEING** did so on the 737 MAX 8 MCAS design, costing **STÉPHANIE** and others their lives.

55. As **BOEING's** former flight controls engineer, Peter Lemme, said: "A hazardous failure mode depending on a single sensor, I don't think passes muster."[18]

56. **BOEING** has repeatedly and intentionally violated this system safety design principle and egregiously abused its position in obtaining FAA certification to allow it to pass certification muster, resulting in the deaths and serious injuries of hundreds of **BOEING** airplane passengers over the years.

F. BOEING REJECTED MULTIPLE OPTIONS TO MAKE THE 737 MAX 8 SAFER

57. Despite the MCAS' glaring flaws, **BOEING** had two available safety features that could mitigate the risk of the AOA sensor failing and causing an uncontrolled dive, but **BOEING** consciously chose to make these safety features optional add-ons for airlines at an additional charge. One such feature is an angle of attack indicator, which would display the readings from

[18] Id.

an AOA sensor.[19] Without this upgrade, pilots do not have a reading of what the AOA is registering, making it more difficult to identify an AOA malfunction.

58. The other safety feature is called a disagree light. The 737 MAX 8 comes outfitted with two AOA sensors at the front of the plane, but the MCAS only takes readings from one sensor, leaving the system vulnerable to a single point of failure. Upgrades to the MCAS software coupled with the installation of a disagree light in the cockpit would alert pilots if the two AOA sensors register readings at odds with each other.

59. Aviation analyst, Bjorn Fehrm, has stated that these safety features are "critical" and "cost almost nothing for the airlines to install."[20] Upgrades to the MCAS software could also program the system to turn off in the event the two AOA readings are materially out-of-sync.[21]

60. Despite the potential for the AOA sensor failing and wrongfully activating the MCAS, forcing the plane downward, **BOEING** did not install the AOA indicators or disagree light as standard. Instead, **BOEING** offered them only as options, charging a premium for these essential safety features.[22]

G. BOEING MISREPRESENTED THE 737 MAX 8 TO PILOTS AND AIRLINES, DOWNPLAYING THE NEED FOR ESSENTIAL TRAINING

61. With the 737 MAX 8 certified by the FAA, **BOEING** began delivering aircraft all over the world starting in May 2017. The 737 MAX 8 was an incredibly popular aircraft and highly profitable for **BOEING**. [23]

62. As **BOEING** had intended, pilots transitioning from the older 737s to the 737 MAX

[19] New York Post, "Boeing Charged Extra for Safety Features That May Have Prevented Crashes," by Yaron Steinbuck, https://www.nypost.com/2019/03/21/business/boeing-safety-features-charge.html, March 21, 2019.
[20] Id.
[21] Id.
[22] Id.
[23] The New Yorker, "How Did the F.A.A. Allow the Boeing 737 MAX to Fly?," by John Cassidy, www.newyorker.com/news/our-columnishts/how-did-the-faa-allow-the-boeing-737-max-to-fly, March 18, 2019.

8 were not required by the FAA to receive extensive training on the 737 MAX 8 aircraft because it obtained the same "type rating" as early 737 models. This was a primary selling point for the 737 MAX 8 as it was presented to airlines. On its website, **BOEING** represented to airlines that "as you build your 737 MAX fleet, millions of dollars will be saved because of its commonality with the Next-Generation 737."[24]

63. Due to **BOEING's** representations regarding the 737 MAX 8's commonality with the 737NG, pilots have reported that they were given just 56 minutes of training on an iPad about the differences between the new **BOEING** 737 MAX 8 planes and the older 737s. The MCAS system was not discussed during this training.

64. With simulators unavailable at the time the 737 MAX 8 was pressed into service, pilots with United Airlines put together their own 13-page guide to the 737 MAX 8, but because of **BOEING's** failure to indicate the critical importance of the relevant issues, this guide too failed to mention the MCAS, leaving pilots unprepared to deal with sudden and unexpected dives caused by the automated system in the aircraft.

H. LION AIR FLIGHT JT 610 CRASHED AFTER PILOTS EXPERIENCE A FLIGHT CONTROL ISSUE

65. On October 29, 2018, Lion Air Flight JT 610 ("Flight 610") departed Jakarta, Indonesia. Shortly after takeoff, the pilots complained of flight control issues as the plane repeatedly pitched down despite the pilots' efforts to climb. The pilots reported unreliable airspeed and altitude readings. In the audio recordings from the cockpit, the rattle of a stick shaker can be heard, a device used to alert pilots of a potential stall, which can occur when a plane ascends too quickly.

[24] Seattle Times, "Flawed Analysis Failed Overnight: How Boeing, FAA Certified the Suspect 737 MAX Flight Control, System," by Dominic Gates, https://www.seattletimes.com/business/boeing-aerospace/failed-certification-faa-missed-safety-issues-in-the-737-max-system-implicated-in-the-lion-air-crash, March 21, 2019.

66. The pilots requested permission to return to Jakarta, which was granted, but the plane did not return. Satellite data showed the plane rising and falling repeatedly—more than 20 times—as the pilots struggled to wrest control back from the automated systems. Within just 12 minutes of taking off, Flight 610 crashed into the Java Sea, killing all 189 people onboard.

67. The cockpit voice recording recovered from the wreckage revealed that while the plane danced perilously across the sky, one of the pilots flipped through a technical manual in an attempt to identify the problem while the other pilot prayed.[25] The pilots appeared unaware of the MCAS and its potential role in overriding their manual controls.[26]

68. Preliminary analysis of the crash and data obtained from the plane's flight data recorder show that one of the **ROSEMOUNT** AOA sensors produced a reading that was at least 20 degrees different from the other AOA sensor as the plane took off and began its climb. This strongly suggests that a malfunction in the AOA sensor feeding information to the MCAS triggered an unwarranted activation of the MCAS system at a low altitude, causing the plane's nose to pitch down.

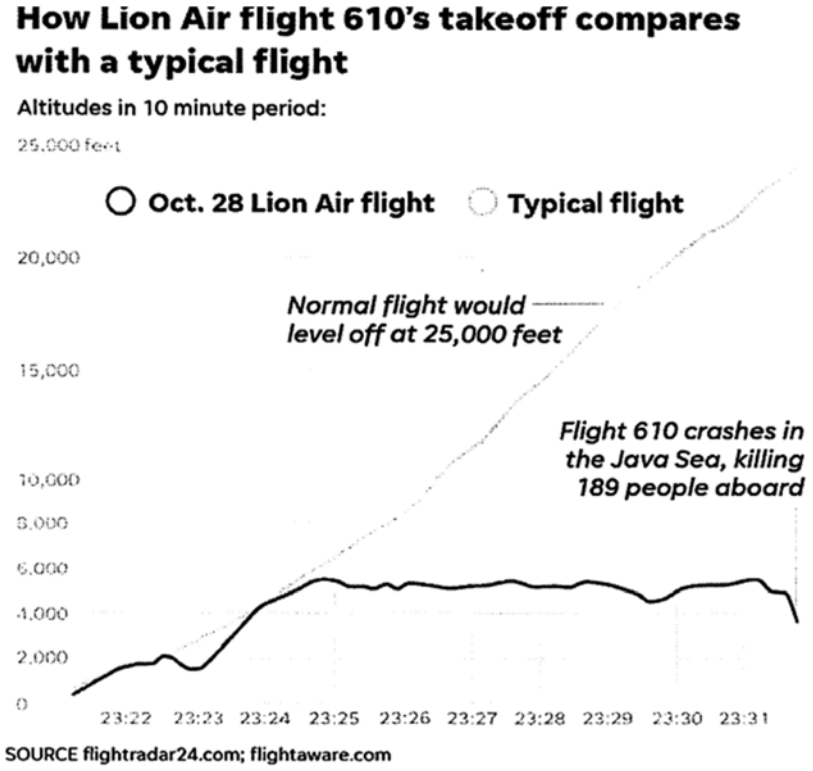
I. BOEING FAILED TO TAKE NECESSARY ACTION AFTER THE LION AIR FLIGHT 610 CRASH

69. Following the tragic crash of Lion Air Flight 610, **BOEING** knew or had reason to know that malfunctions in the **ROSEMOUNT** AOA sensor and MCAS were responsible. The FAA issued an Emergency Airworthiness Directive ("AD") 2018.23.51 on November 7, 2018 that identified the potential danger presented by the flight control system, but did not provide clear instruction on what pilots should do in the event of an AOA failure:

[25] The New York Times, "Ethiopian Airlines Had a MAX 8 Simulator, but Pilot on Doomed Flight Didn't Receive Training on It," by Selam Gebrehidon, https://www.nytimes.com/2019/03-20/world/africa/ethiopian-airlines-boeing.html, March 20, 2019.
[26] Id.

> "This AD was prompted by analysis performed by the manufacturer showing that if an erroneously high single angle of attack (AOA) sensor input is received by the flight control system, there is a potential for **repeated nose-down trim commands of the horizontal stabilizer.** We are issuing this AD to address this potential resulting nose-down trim, which could **cause the flight crew to have difficulty controlling the airplane,** and lead to **excessive nose-down altitude, significant altitude loss, and possible impact with terrain."** (emphasis added)

70. The flight path of Lion Air Flight 610 suggests that the malfunctioning AOA sensor and nose-down commands from the MCAS were a factor in the crash:



71. After the AD 2018.23.51, **BOEING** began investigating a software fix, but did not insist on further training of pilots to deal with the defective AOA sensor or MCAS software. **BOEING** also downplayed the significance of the threat presented by the MCAS and did not call for the action needed to prevent further incidents.

72. **BOEING** maintained that the failure of the MCAS could be handled in the same way as a standard "stabilizer runaway," a malfunction which occurs when the Trimmable

Horizontal Stabilizer on the aircraft tail fails to stop at the selected position and continues to deflect up or down.

73. Pilots and aviation experts have challenged **BOEING's** above-noted characterization because the MCAS failure does not behave like a runaway stabilizer. First, with a runaway stabilizer, there is continuous un-commanded movement of the tail. In contrast, the movement of the tail is not continuous in an MCAS failure: pilots are able to counter the nose down movement, only to have the MCAS move the tail once again. Second, the MCAS alters the control column response to the stabilizer movement. Pulling back on the column normally interrupts any stabilizer nose-down movement, but with an MCAS in operation, that control column function is disabled.[27]

74. **BOEING's** attempt to deflect blame onto purportedly poorly trained pilots wrongfully minimizes **BOEING's** responsibility for those crashes. This despite it being foreseeable that pilots would be confused by MCAS' control over the 737 MAX 8 both because the system's nose-down commands were different from a common stabilizer problem and because pilots were not told the MCAS existed (let alone how it functioned). When seconds mattered, the confusion caused by **BOEING's** defective and unsafe design, and its failure to inform pilots about critical feature of the planes they were flying, were the difference between life and death.

75. Both before and after the Lion Air Flight 610 crash, several pilots anonymously submitted complaints on the FAA Aviation Safety Reporting System ("ASRS"), which described similar flight control issues and unanticipated dives with the 737 MAX 8 aircraft. One such report submitted by a pilot in November 2018—after the Lion Air crash but before the Ethiopian Airlines

[27] Seattle Times, "Flawed Analysis, Failed Overnight: How Boeing, FAA Certified the Suspect 737 MAX Flight Control System", by Dominic Gates, https://www.seattletimes.com/business/boeing-aerospace/failed-certification-faa-missed-safety-issues-in-the-737-max-system-implicated-in-the-lion-air-crash, March 21, 2019.

crash—describes the pilot's reaction to learning of the MCAS system:

> **"I think it is unconscionable that a manufacturer, the FAA, and the airlines would have pilots flying an airplane without adequately training, or even providing available resources and sufficient documentation to understand the highly complex systems that differentiate this aircraft from prior models.** The fact that this airplane requires such jury rigging to fly is a red flag. Now we know the systems employed are error prone-even if the pilots aren't sure what those systems are, what redundancies are in place, and failure modes.
>
> I am left to wonder: what else don't I know? **The Flight Manual is inadequate and almost criminally insufficient.** All airlines that operate the MAX must insist that Boeing incorporate ALL systems in their manuals." (emphasis added)

76. Shortly after Lion Air Flight 610 crashed, and after learning of still-in-use numerous complaints of similar malfunctions, **BOEING** knew that hundreds of the 737 MAX 8 aircraft were still in use, carrying passengers all over the globe, posing a substantial risk that a similar crash would occur absent appropriate and immediate intervention.

77. Despite this knowledge and the gravity of the risks presented to passengers, crew and the public at large resulting from imperiled airplanes flying overhead, **BOEING** consciously and intentionally failed to act and/or acted without the urgency commensurate with the risk of harm presented by its defective and dangerous aircraft.

78. Instead, **BOEING** kept a keen eye on the record revenue the 737 MAX 8 was generating and the backlog of orders it had yet to fill. Just a few months after sharing condolences for the victims of Lion Air Flight 610, **BOEING's** twitter account posted the following:

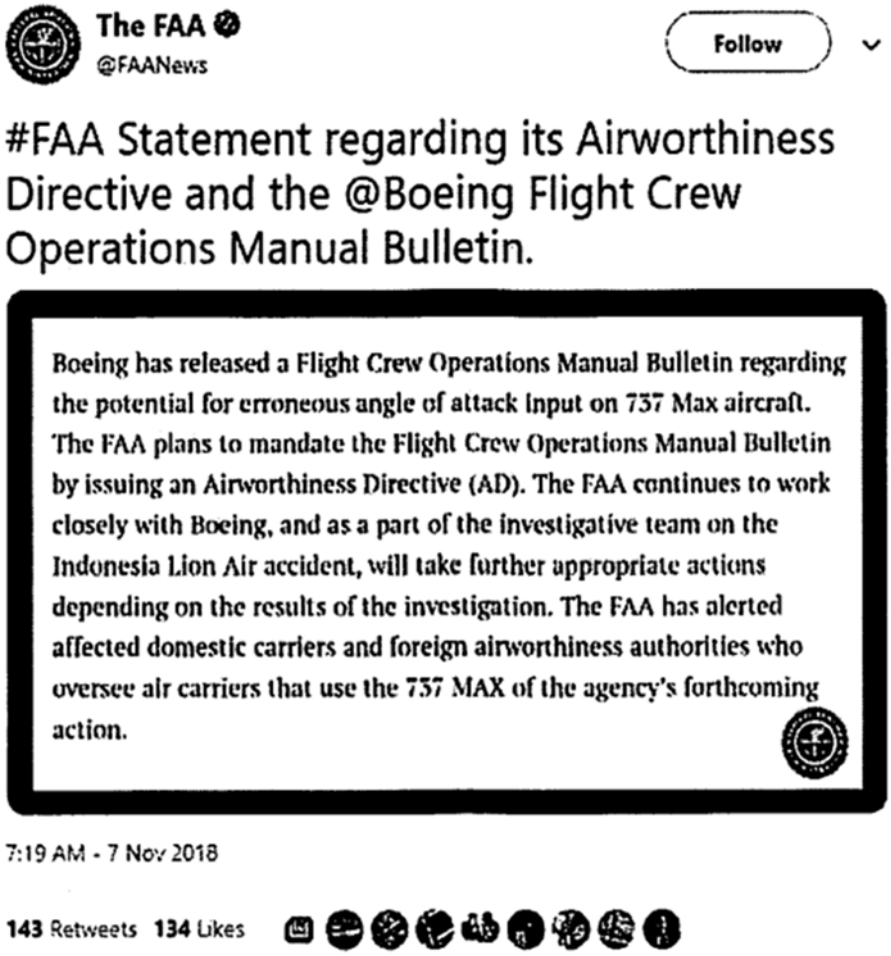
79. **PLAINTIFF**, on information and belief, alleges that **BOEING** chose not to respond to the Lion Air Flight 610 crash with the appropriate degree of urgency or with appropriate safety steps because it feared doing so would result in financial loss to **BOEING** if airlines grounded their aircraft or had to retrain their pilots. Instead, motivated by profit, **BOEING** downplayed the danger presented by its defective and dangerous aircraft, creating a false sense of security and ensuring that the 737 MAX 8 would still be utilized to carry passengers despite the presence of the defective and dangerous AOA sensors and MCAS.

J. THE FAA DOWNPLAYED THE SERIOUS KNOWN SAFETY RISK AFTER THE LION AIR FLIGHT 610 CRASH

80. The FAA aided and abetted **BOEING** in the latter's scheme to downplay the clear and present danger to the public presented by **BOEING's** dangerous and defective aircraft because **BOEING** shared a close relationship with the FAA, and the federal government generally, such that the FAA consciously and intentionally turned a blind eye to **BOEING's** reckless conduct.

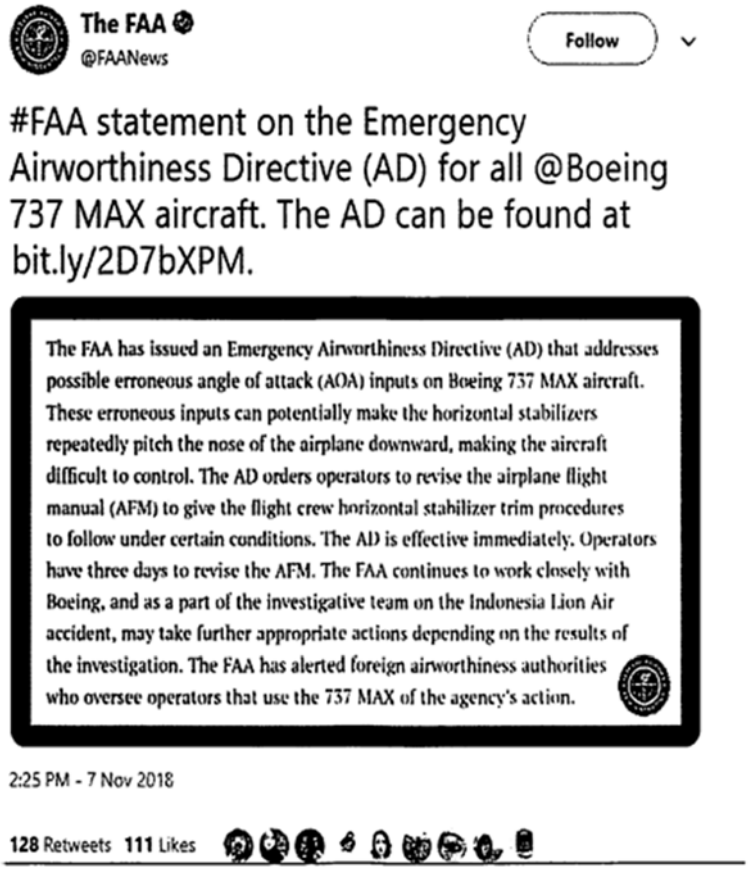
81. On November 7, 2018, at 7:19 AM, the FAA posted the following statement to the

public on its Twitter feed, a statement that purposefully omitted the word "Emergency" to describe that day's FAA Airworthiness Directive and that presented no language indicating any safety risk or hazard associated with continued flight of the 737 MAXS 8 or with being a passenger on a 737 MAX 8:



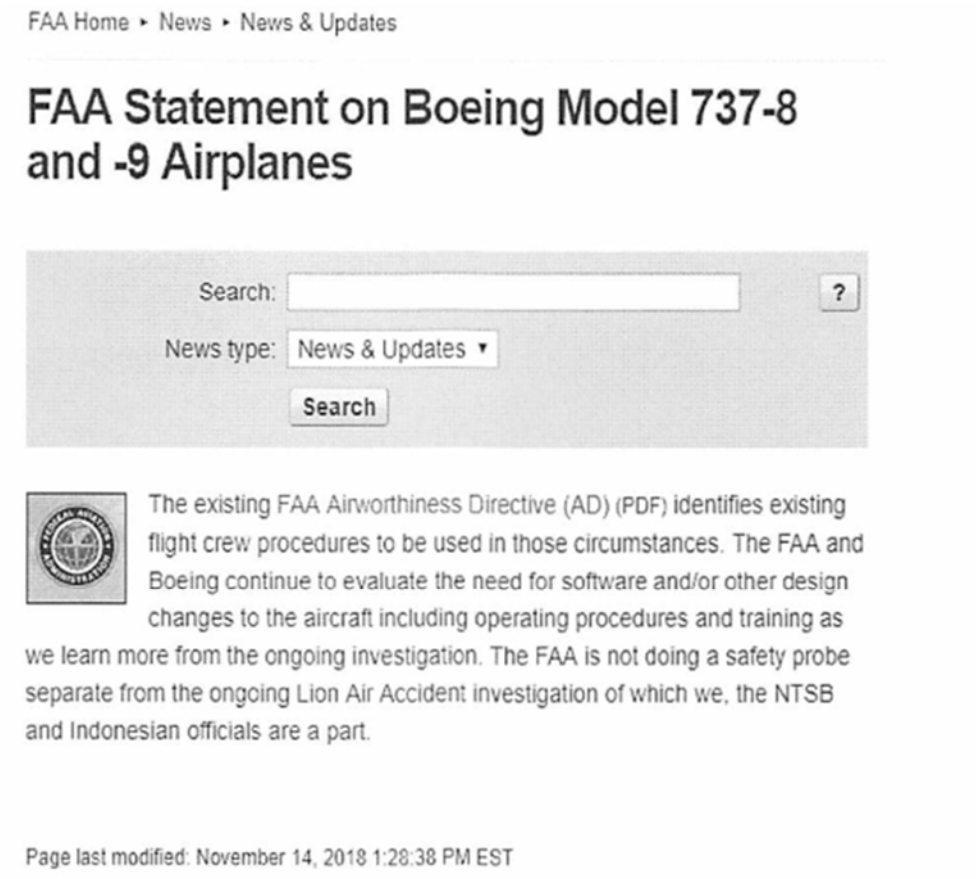
82. Over five hours later, the FAA posted a different and new warning to the public on its Twitter feed. Recognizing its negligent, reckless, and/or purposeful omission of the word "emergency" from the first post, the FAA acknowledged that its Airworthiness Directive was an *Emergency* Airworthiness Directive (emphasis added). This post provided somewhat more information to the public, but still fell severely short of informing the public of the serious safety risk involved and misled the public as to the nature and character of the problems with the 737

MAX 8, the level of risk associated with such problems and the actions necessary to fully remediate the problem with the 737 MAX 8. The post presented the hazard of the 737 MAX 8 as if any airline and pilot could easily remediate the hazard by a simple revision to "the airplane flight manual," which all "operators have three days to revise," lulling the public into a false sense of security that all known safety hazards with the 737 MAX 8 were insignificant and had been remediated, and that the plane was safe for passenger transportation. The post read:



83. To make matters worse, the FAA posted a media release to its website seven days later on November 14, 2018, titled "FAA Statement on Boeing Model 737- 8 and -9 Airplanes." In this statement, the FAA took a step backward and again omitted the word "emergency" from the statement. It also failed to inform the public of any serious safety risk and misled the public as to the nature and character of the problems with the 737 MAX 8, the level of risk associated with

such problems and the actions necessary to fully remediate such problems. The FAA also made a further, affirmative statement aimed at inducing the public to believe safety concerns with the 737 MAX 8 were insignificant and not serious. It did so by concluding the media release: "The FAA is not doing a safety probe separate from the ongoing Lion Air Accident investigation of which we, the NTSB and Indonesian officials are a part" (emphasis added). Notably, this "FAA Statement" still appears on the "News and Updates" portion of the FAA website. It reads as follows:



FAA Home ▸ News ▸ News & Updates

FAA Statement on Boeing Model 737-8 and -9 Airplanes

Search: ?

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The existing FAA Airworthiness Directive (AD) (PDF) identifies existing flight crew procedures to be used in those circumstances. The FAA and Boeing continue to evaluate the need for software and/or other design changes to the aircraft including operating procedures and training as we learn more from the ongoing investigation. The FAA is not doing a safety probe separate from the ongoing Lion Air Accident investigation of which we, the NTSB and Indonesian officials are a part.

Page last modified: November 14, 2018 1:28:38 PM EST

84. The close relationship between the FAA and **BOEING** is clear from the connections cultivated between present and former **BOEING** executives at the FAA. After Lion Air Flight 610 crashed, and at the very moment that the FAA should have been providing adequate, transparent and sufficient public safety advisories and warnings regarding the 737 MAX 8, former

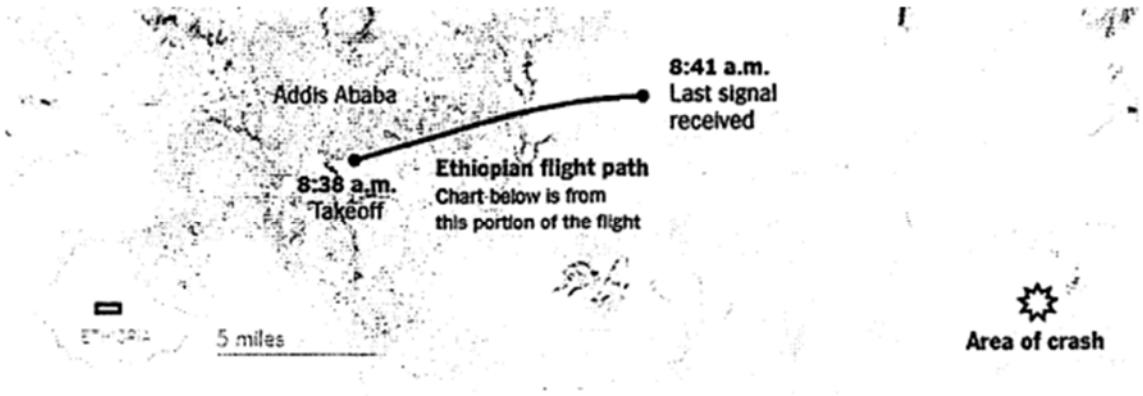
BOEING executive Patrick Shanahan was elevated to Acting Secretary of Defense and has recently been nominated by President Trump to be the Secretary of Defense. Former United States Ambassador Nikki Haley joined the **BOEING** board of directors following her resignation from government service. **BOEING** reportedly donated $1 million to President Trump's inauguration. And it has been reported that **BOEING's** CEO personally called President Trump following the deadly Lion Air and Ethiopian Airlines crashes to advocate against the grounding of the 737 MAX 8.[28]

85. **STÉPHANIE** and other passengers on Ethiopian Flight 302 relied on these media posts by the FAA to their detriment, duped into a false sense of security about traveling on a 737 MAX 8.

K. ETHIOPIAN AIRLINES FLIGHT 302 CRASHES KILLING ALL 157 PEOPLE ON BOARD

86. On March 10, 2019, Flight 302 took off from Addis Ababa, Ethiopia towards its destination of Nairobi, Kenya. Within one minute of its departure, the pilot calmly radioed that he was having flight control problems. Within three minutes, his voice now sounding panicked, the pilot requested permission to return back to Addis Ababa. The plane was accelerating abnormally and oscillating up and down. Shortly thereafter, all communication with Flight 302 stopped and the plane violently crashed into a field, killing all 157 people aboard, including **STÉPHANIE**.

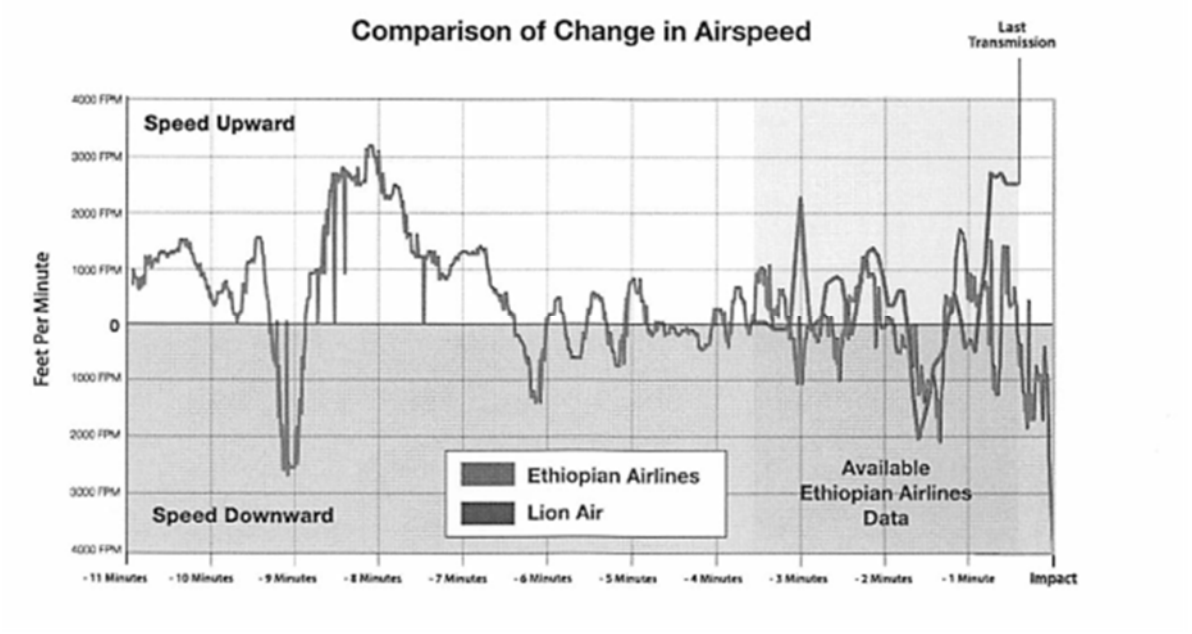
[28] VOX, "Boeing's Cozy Relationship with Trump Complicates the FAA's Decision to Not Ground Boeing Planes – Trump and Boeing Go Way Back," by Emily Stewart, https://www.vox.com/policy-and-politics/2019/3/13/18263719/boeing-ceo-dennis muilenburg-trump-tweet-call, March 13, 2019.



By Scott Reinhard | Source: Path data from Flightradar24

87. The similarity between Ethiopian Airlines Flight 302 and Lion Air Flight 610 crashes and the data released to date for both suggest that both aircraft experienced an erroneous **ROSEMOUNT** AOA reading and activation of the deadly MCAS. The jack screws from the horizontal tail stabilizer were recovered from both crashes and both showed that the planes had been oriented in a dive with the nose pointing down. Both pilots reported flight control issues and could not maintain a steady altitude or speed with similarly erratic flight paths before crashing. With respect to Ethiopian Airlines Flight 302, the aircraft's nose began to pitch down just 450 feet above the ground.

The following side-by-side comparison reveals the striking similarities between the two doomed aircraft in changes in vertical speed:



88. Regulators finally decided to ground the 737 MAX 8 aircraft in the wake of the Ethiopian Airlines Flight 302 crash to allow for a MCAS software upgrade and safety assessment. The Department of Transportation, with assistance from the FBI, is now investigating the 737 MAX 8's certification process, a federal grand jury probe has been empaneled and Congressional hearings are underway.

89. Whistleblowers have also now come forward to report that safety inspectors with the FAA, including those in the Aircraft Evaluation Group responsible for evaluating the safety of the 737 MAX 8, lacked the proper training and certifications to do their jobs. To make matters worse, information obtained from whistleblowers purportedly indicates that the FAA was aware that its inspectors lacked proper training and certification as early as August 2018, well before the crashes of Lion Air Flight 610 and Ethiopian Airlines Flight 302.

V. CLAIMS FOR RELIEF

COUNT I
NEGLIGENCE AND WILLFUL AND WANTON CONDUCT
(THE BOEING COMPANY)

90. **PLAINTIFF** incorporates and re-alleges each of the paragraphs set forth above as though fully set forth herein.

91. At all relevant times hereinabove set forth, **BOEING** was the designer, manufacturer, distributor and/or seller of the **BOEING** 737 MAX 8 aircraft. **BOEING** was, at all times relevant, in the business of designing, testing, manufacturing, selling, assembling, building, distributing, marketing, and/or inspecting aircraft as suitable and safe for passenger air transportation, including the subject **BOEING** 737 MAX 8 that crashed in Ethiopia on March 10, 2019.

92. At all relevant times hereinabove set forth, **BOEING** operated, supervised, managed and/or oversaw the training facility that trained Ethiopian Airlines' pilots to fly the **BOEING** 737 MAX 8 and knew or should have known of the unfitness of Ethiopian Airlines pilots' to safely operate the **BOEING** 737 MAX 8 for passenger air travel.

93. At all times hereinabove set forth, **BOEING** breached its duty of care to **STÉPHANIE** as a passenger aboard Ethiopian Airlines Flight 302 with respect to the design, manufacture, inspection, testing, assembly, certification, distribution, sale of and pilot training for a safe, airworthy aircraft; including the failure to provide training, instruction, and/or issue advisory warnings necessary to assure the safe operation, control, management and/or maintenance of the aircraft. **BOEING's** acts and/or omissions further include but are not limited to the following:

a. designing, manufacturing, assembling and/or certifying an aircraft with an anti-stall

system controlled by a single AOA sensor that was susceptible to failure without redundant systems;

b. designing, manufacturing, assembling and/or certifying an aircraft with a flight control system susceptible to erroneous information from the AOA sensor, and failing to install AOA indicators and/or AOA disagree lights as standard features rather than optional upgrades;

c. designing, manufacturing, assembling and/or certifying an aircraft with a flight control system that would initiate a dangerous automated dive without any command from a pilot and without a means to promptly override the automated dive;

d. marketing and selling the 737 MAX 8 as an analog to **BOEING's** 737NG to consciously and intentionally induce airlines to avoid the time-consuming retraining of airline pilots with the knowledge that the 737 MAX 8 contained a new and potentially dangerous secret MCAS automated flight control system;

e. failing to provide adequate warning with regard to the 737 MAX 8's MCAS and the risk of an automated dive, or clear instruction to promptly override such an MCAS automated dive;

f. failing to conduct a thorough and accurate safety assessment of the aircraft, including **BOEING's** failure to account for the degree to which the MCAS could move the horizontal stabilizer of the aircraft and failure to account for the resetting of the automated dive after each command from a pilot;

g. failing to properly train pilots on the new automated MCAS systems on the 737 MAX 8;

h. failing to properly train pilots to identify an AOA sensor failure and MCAS input;

i. failing to properly train pilots to disengage the stabilizer trim motor on the 737 MAX 8 in the event of an AOA sensor failure or unanticipated dive;

j. designing, assembling, and distributing a flight manual that did not warn of the risks presented by the MCAS, faulty AOA sensors or automated dives;

k. designing, manufacturing, assembling and/or certifying an airplane flight manual that failed to provide clear instructions or procedures on how to promptly override an automated MCAS dive;

l. failing to promptly issue a software patch and/or other appropriate safety procedures to address the risk of malfunctioning AOA sensors and automated MCAS dives following the October 29, 2018 crash of Lion Air Flight JT 610;

m. failing to ground all 737 MAX 8 aircraft following the crash of Lion Air Flight JT 610 until such a software patch and/or other appropriate safety procedures could be implemented;

n. failing to properly warn pilots, airlines, and the public of the risk of malfunctioning AOA sensors and automated MCAS dives following the crash of Lion Air Flight JT 610.

94. As a direct and legal result of **BOEING's** negligence, carelessness, gross negligence, recklessness and/or otherwise wrongful acts and/or omissions hereinabove set forth, **STÉPHANIE** died in the crash of Ethiopian Airlines Flight 302.

95. As a direct and legal result of the wrongful acts and/or omissions hereinabove set forth, **STÉPHANIE** suffered pre-impact injury and death, including fear of impending and imminent death, and **PLAINTIFF** and her family have been damaged by the death of

STÉPHANIE.

96. As a direct and legal result of the wrongful acts and/or omissions of **BOEING**, hereinabove alleged, **PLAINTIFF** and her family suffered and continue to suffer the loss of love, society, solace, companionship, comfort, care, assistance, protection affection, and/or moral support from **STÉPHANIE,** as well as other pecuniary injuries including grief, sorrow and mental suffering, in amounts to be determined at trial.

97. As a further direct and legal result of the wrongful conduct of **BOEING** set forth above, **PLAINTIFF** and her family incurred or will incur memorial, funeral and/or burial expenses in an amount according to proof at trial.

98. As a further direct and legal result of the wrongful conduct of **BOEING** set forth above, **PLAINTIFF** and her family suffered economic losses, including but not limited to the loss of financial support and/or the loss of household services, in amounts according to proof at trial.

99. The potential harm to airline passengers, pilots, crews, and the public from the 737 MAX 8 was objectively foreseeable both in nature and in scope and were subjectively known to **BOEING** for all of the aforementioned reasons, including but not limited to: **BOEING's** own safety assessment of the AOA sensor and MCAS during development of the 737 MAX 8, which revealed potential problems with the system; the evidence that flight control issues caused the crash of Lion Air Flight 610 and death of 189 people in October 2018; complaints lodged by pilots in the ASRS database regarding the performance of the MCAS; the lack of clear instruction and training regarding the operation of the 737 MAX 8, and the reported incidences of unexpected MCAS dives and flight control issues and **BOEING's** identification of and failure to implement a software upgrade to address problems with the AOA sensors and MCAS in the weeks and months prior to the crash of Ethiopian Airlines Flight 302.

100. As set forth above and as will be shown by proof at trial, there is a high degree of certainty that **PLAINTIFF** and her family have suffered those injuries and damages, and that there is an extremely close connection between those injuries and damages and **BOEING's** conduct. A high degree of moral blame is attached to **BOEING's** conduct, and the policy of preventing future harm justifies both the recognition of the existence of a duty of care owed by **BOEING** and the imposition of all damages described above.

101. Based on the foregoing, **BOEING** acted willfully, wantonly, with oppression, fraud, malice, and/or with a knowing, conscious disregard for the rights and/or safety of others, such that **PLAINTIFF** requests that the trier of fact, in the exercise of sound discretion, award **PLAINTIFF** additional damages for the sake of example and sufficient to punish **BOEING,** for its despicable conduct, in an amount reasonably related to **PLAINTIFF's** actual damages and **BOEING's** financial condition, yet sufficiently large enough to be an example to others and to deter **BOEING** and others from engaging in similar conduct in the future.

COUNT II
BREACH OF WARRANTY
(THE BOEING COMPANY)

102. **PLAINTIFF** incorporates and re-alleges each of the paragraphs set forth above as though fully set forth herein.

103. **BOEING** was the designer, manufacturer, distributor and/or seller of the **BOEING** 737 MAX 8, and/or its component parts and instruments involved in the subject crash.

104. Prior to the crash of Ethiopian Airlines Flight 302, **BOEING** expressly and/or impliedly warranted and represented that the **BOEING** 737 MAX 8 aircraft, including its component parts and instruments, and in conjunction with the instructions and warnings given by **BOEING,** was airworthy, of merchantable quality, and both fit and safe for the purpose of

commercial air travel for which it was designed, intended and used and free from all defects. Additionally, **BOEING** further warranted that the 737 MAX 8, and its component parts and instruments, was free from all defects.

105. **BOEING** breached said warranties in that the 737 MAX 8 was not airworthy, of merchantable quality, or fit and safe for the purposes for which it was designed, intended and used, and free from all defects as set forth above. The aircraft, and its component parts and instruments, were in substantially similar condition to its original condition at delivery to Ethiopian Airlines**.**

106. **STÉPHANIE**, as a passenger of Ethiopian Airlines Flight 302, was an intended third-party beneficiary of **BOEING's** warranties that the **BOEING** 737 MAX 8, and its component parts was airworthy, of merchantable quality, both fit and safe for the purposes for which it was designed, intended and used, and free from all defects.

107. **STÉPHANIE** reasonably relied on these warranties to her detriment.

108. As a direct and legal result of the wrongful acts and/or omissions hereinabove set forth, **STÉPHANIE** suffered pre-impact injury and death, including fear of impending and imminent death, and **PLAINTIFF** and her family have been damaged by the death of **STÉPHANIE**.

109. As a direct and legal result of the wrongful acts and/or omissions of **BOEING**, hereinabove alleged, **PLAINTIFF** and her family suffered and continue to suffer the loss of love, society, solace, companionship, comfort, care, assistance, protection, affection and/or moral support from **STÉPHANIE**, as well as other pecuniary injuries including grief, sorrow and mental suffering, in amounts to be determined at trial.

110. As a further direct and legal result of the wrongful conduct of **BOEING** set forth above, **PLAINTIFF** and her family incurred or will incur memorial, funeral expenses in amounts

according to proof at trial.

111. As a further direct and legal result of the wrongful conduct of **BOEING** set forth above, **PLAINTIFF** and her family suffered economic losses, including but not limited to the loss of financial support and/or the loss of household services in amounts according to proof at trial.

112. The potential harm to airline passengers, pilots, crews and the public from the 737 MAX 8 was objectively foreseeable, both in nature and in scope, and was subjectively known to **BOEING** for all of the aforementioned reasons, including but not limited to: **BOEING's** own safety assessment of the AOA sensor and MCAS during development of the 737 MAX 8, which revealed potential problems with the system; the evidence that flight control issues caused the crash of Lion Air Flight 610 and death of 189 people in October 2018; complaints lodged by pilots in the ASRS database regarding the performance of the MCAS; the lack of clear instruction and training regarding the operation of the 737 MAX 8, and the incidence of unexpected MCAS dives and flight control issues and **BOEING's** identification of and failure to implement a software upgrade to address problems with the AOA sensors and MCAS in the weeks and months prior to the crash of Ethiopian Airlines Flight 302.

113. As set forth above and as will be shown by proof at trial, there is a high degree of certainty that **PLAINTIFF** and her family have suffered those injuries and damages and that there is an extremely close connection between those injuries and damages and **BOEING's** conduct. A high degree of moral blame is attached to **BOEING's** conduct and the policy of preventing future harm justifies both the recognition of the existence of a duty of care owed by **BOEING** and the imposition of all damages described above.

114. Based on the foregoing, **BOEING** acted willfully, wantonly, with oppression, fraud, malice, and/or with a knowing, conscious disregard for the rights and/or safety of others,

such that **PLAINTIFF** requests that the trier of fact, in the exercise of sound discretion, award **PLAINTIFF** additional damages for the sake of example and sufficient to punish **BOEING** for its despicable conduct, in an amount reasonably related to **PLAINTIFF's** actual damages and **BOEING's** financial condition, yet sufficiently large enough to be an example to others and to deter **BOEING** and others from engaging in similar conduct in the future.

COUNT III
STRICT LIABILITY
(THE BOEING COMPANY)

115. **PLAINTIFF** incorporates and re-alleges each of the paragraphs set forth above as though fully set forth herein.

116. **BOEING** designed, manufactured, distributed and/or sold the **BOEING** 737 MAX 8, and its component parts and instruments, involved in the crash of Ethiopian Airlines Flight 302. **BOEING** was in the business of designing, testing, manufacturing, selling, assembling, building, distributing, marketing and/or inspecting aircraft as suitable for passenger air transportation, including the **BOEING** 737 MAX 8, and its component parts and instruments, that crashed in Ethiopia on March 10, 2019.

117. At all times relevant, the **BOEING** 737 MAX 8 aircraft, and its component parts and instruments, was used for the purposes of which it was manufactured, designed, inspected, sold and intended to be used, in a manner reasonably foreseeable to **BOEING.**

118. At all times relevant, the **BOEING** 737 MAX 8, and its component parts and instruments, was defective, dangerous, unsafe and not airworthy by reason of **BOEING's** defective manufacture, design, warning systems, inspections, testing, service and/or maintenance and its component parts and instruments, as set forth above. The aircraft, and its component parts and instruments, was in substantially similar condition to its original condition at delivery to

Ethiopian Airlines.

119. As a direct and legal result of the wrongful acts and/or omissions hereinabove set forth, **STÉPHANIE** suffered pre-impact injury and death, including fear of impending and imminent death, and **PLAINTIFF** and her family have been damaged by the death of **STÉPHANIE**.

120. As a direct and legal result of the wrongful acts and/or omissions of **BOEING**, hereinabove alleged, **PLAINTIFF** and her family suffered and continue to suffer the loss of love, society, solace, companionship, comfort, care, assistance, protection, affection, and/or moral support from **STÉPHANIE**, as well as other pecuniary injuries including grief, sorrow, and mental suffering, in amounts to be determined at trial.

121. As a further direct and legal result of the wrongful conduct of **BOEING** set forth above, **PLAINTIFF** and her family incurred or will incur memorial, funeral and/or burial expenses in amounts according to proof at trial.

122. As a further direct and legal result of the wrongful conduct of **BOEING** set forth above, **PLAINTIFF** and her family suffered economic losses, including but not limited to the loss of financial support, and/or the loss of household services in amounts according to proof at trial.

123. The potential harm to airline passengers, pilots, crews and the public from the 737 MAX 8 was objectively foreseeable, both in nature and in scope, and was subjectively known to **BOEING** for all of the aforementioned reasons, including but not limited to: **BOEING's** own safety assessment of the AOA sensor and MCAS during development of the 737 MAX 8, which revealed potential problems with the system; the evidence that flight control issues caused the crash of Lion Air Flight 610 and death of 189 people in October 2018; complaints lodged by pilots in the ASRS database regarding the performance of the MCAS; the lack of clear instruction and

training regarding the operation of the 737 MAX 8, and the incidence of unexpected MCAS dives and flight control issues and **BOEING's** identification of and failure to implement a software upgrade to address problems with the AOA sensors and MCAS in the weeks and months prior to the crash of Ethiopian Airlines Flight 302.

124. As set forth above and as will be shown by proof at trial, there is a high degree of certainty that **PLAINTIFF** and her family have suffered those injuries and damages, and that there is an extremely close connection between those injuries and damages and **BOEING's** conduct. A high degree of moral blame is attached to **BOEING's** conduct, and the policy of preventing future harm justifies both the recognition of the existence of a duty of care owed by **BOEING** and the imposition of all damages described above.

125. Based on the foregoing, **BOEING** acted willfully, wantonly, with oppression, fraud, malice, and/or with a knowing, conscious disregard for the rights and/or safety of others, such that **PLAINTIFF** requests that the trier of fact, in the exercise of sound discretion, award **PLAINTIFF** additional damages for the sake of example and sufficient to punish **BOEING** for its despicable conduct, in an amount reasonably related to **PLAINTIFF's** actual damages and **BOEING's** financial condition, yet sufficiently large enough to be an example to others and to deter **BOEING** and others from engaging in similar conduct in the future.

COUNT IV
FAILURE TO WARN
(THE BOEING COMPANY)

126. **PLAINTIFF** incorporates and re-alleges each of the paragraphs set forth above as though fully set forth herein.

127. **BOEING** designed, manufactured, distributed, and/or sold the **BOEING** 737 MAX 8 and its component parts and instruments, involved in the crash of Ethiopian Airlines Flight

302. **BOEING** was in the business of designing, testing, manufacturing, selling, assembling, building, distributing, marketing, and/or inspecting aircraft as suitable for passenger air transportation, including the **BOEING** 737 MAX 8 that crashed in Ethiopia on March 10, 2019.

128. At all times relevant, the **BOEING** 737 MAX 8 aircraft was used for the purposes for which it was manufactured, designed, inspected, sold and intended to be used, in a manner reasonably foreseeable to **BOEING.**

129. At all times relevant, the **BOEING** 737 MAX 8 was defective, dangerous, unsafe and not airworthy by reason of **BOEING's** defective manufacture, design, warning systems, inspections, testing, service and/or maintenance and its component parts and instruments, as set forth above.

130. At all times relevant, **BOEING** had knowledge that the **BOEING** 737 MAX 8 was defective, dangerous, unsafe and not airworthy, and in particular, **BOEING** had knowledge of the unreasonably unsafe design of the AOA sensor and automated MCAS, as well as the potential life and death risks of such a failure in these systems.

131. At all times relevant, the risks of failure of the **BOEING** 737 MAX 8 due the aircraft's unreasonably dangerous and defective design presented a substantial danger when the aircraft is used or misused in an intended or reasonably foreseeable way.

132. Ordinary consumers, including but not limited to airlines, flight crew and passengers, would not have recognized the potential risks presented by the aircraft's unreasonably dangerous and defective design.

133. Despite the significant danger and substantial flaws in the operation of the 737 MAX 8, including the AOA sensors and MCAS system, **BOEING** failed to reasonably warn airlines, pilots, customers, travelers, or the public about the dangers of the 737 MAX 8. As a result

of **BOEING's** failure to warn, the pilots of Ethiopian Airlines Flight 302 were unprepared to operate the 737 MAX 8 safely and Ethiopian Airlines Flight 302 crashed in March of 2019.

134. As a direct and legal result of the wrongful acts and/or omissions hereinabove set forth, **STÉPHANIE** suffered pre-impact injury and death, including fear of impending and imminent death, and **PLAINTIFF** and her family have been damaged by the death of **STÉPHANIE**.

135. As a direct and legal result of the wrongful acts and/or omissions of **BOEING**, hereinabove alleged, **PLAINTIFF** and her family suffered and continue to suffer the loss of love, society, solace, companionship, comfort, care, assistance, protection, affection, and/or moral support from **STÉPHANIE**, as well as other pecuniary injuries including grief, sorrow, and mental suffering, in amounts to be determined at trial.

136. As a further direct and legal result of the wrongful conduct of **BOEING** set forth above, **PLAINTIFF** and her family incurred or will incur memorial, funeral and/or burial expenses in amounts according to proof at trial.

137. As a further direct and legal result of the wrongful conduct of **BOEING** set forth above, **PLAINTIFF** and her family suffered economic losses, including but not limited to the loss of financial support and/or the loss of household services in amounts according to proof at trial.

138. The potential harm to airline passengers, pilots, crews and the public from the 737 MAX 8 was objectively foreseeable, both in nature and in scope, and was subjectively known to **BOEING** for all of the aforementioned reasons, including but not limited to: **BOEING's** own safety assessment of the AOA sensor and MCAS during development of the 737 MAX 8, which revealed potential problems with the system; the evidence that flight control issues caused the crash of Lion Air Flight 610 and death of 189 people in October 2018; complaints lodged by pilots

in the ASRS database regarding the performance of the MCAS; the lack of clear instruction and training regarding the operations of the 737 MAX 8, and the incidence of unexpected MCAS dives and flight control issues and **BOEING's** identification of and failure to implement a software upgrade to address problems with the AOA sensors and MCAS in the weeks and months prior to the crash of Ethiopian Airlines Flight 302.

139. As set forth above and as will be shown by proof at trial, there is a high degree of certainty that **PLAINTIFF** and her family have suffered those injuries and damages, and that there is an extremely close connection between those injuries and damages and **BOEING's** conduct. A high degree of moral blame is attached to **BOEING's** conduct, and the policy of preventing future harm justifies both the recognition of the existence of a duty of care owed by **BOEING** and the imposition of all damages described above.

140. Based on the foregoing, **BOEING** acted willfully, wantonly, with oppression, fraud, malice, and/or with a knowing, conscious disregard for the rights and/or safety of others, such that **PLAINTIFF** requests that the trier of fact, in the exercise of sound discretion, award **PLAINTIFF** additional damages for the sake of example and sufficient to punish **BOEING** for its despicable conduct, in an amount reasonably related to **PLAINTIFF's** actual damages and **BOEING's** financial condition, yet sufficiently large enough to be an example to others and to deter **BOEING** and others from engaging in similar conduct in the future.

COUNT V
STRICT PRODUCTS LIABILITY
(ROSEMOUNT AREOSPACE, INC.)

141. **PLAINTIFF** hereby incorporates and realleges each of the preceding paragraphs as though fully set forth herein.

142. At all relevant times, **ROSEMOUNT** was a designer, manufacturer and seller of

aerospace products, including AOA sensors.

143. **ROSEMOUNT** designed, tested, manufactured and sold the AOA sensors installed in **BOEING's** 737 MAX 8 airplanes, including the 737 MAX 8 used in Ethiopian Airlines Flight 302.

144. At the time that **BOEING** sold the 737 MAX 8 used in Flight 302 to Ethiopian Airlines, the airplane was defective and unreasonably dangerous in one or more of the following respects:

a. the airplane included AOA sensors designed and sold by **ROSEMOUNT** that were subject to an unacceptable rate of failure; and

b. the airplane included AOA sensors designed and sold by **ROSEMOUNT** that provided erroneous and implausible data that triggered the airplane's lift stall warning system and MCAS, causing the airplane to depart controlled flight and crash.

145. At the time **ROSEMOUNT** sold to **BOEING** the AOA sensors installed on the 737 MAX 8 used in Ethiopian Airlines Flight 302, they were defective and unusually dangerous and their condition was not altered prior to the crash.

146. As a direct and proximate cause of the defective condition of the AOA sensors on the 737 MAX 8 used in Ethiopian Airlines Flight 302, Flight 302 departed controlled flight and crashed, causing the death of **STÉPHANIE** and the damages suffered by **PLAINTIFF** and her family.

147. By reason of the foregoing, the AOA sensors installed on the 737 MAX 8 used in Flight 302 were unreasonably dangerous and defective and **ROSEMOUNT** should be held strictly liable for the death of **STÉPHANIE** and all damages sustained by **PLAINTIFF** and her family.

148. As a direct and legal result of the wrongful acts and/or omissions of **ROSEMOUNT** set forth above, **STÉPHANIE** suffered pre-impact injury and death, including fear of impending and imminent death, and **PLAINTIFF** and her family have been damaged by the death of **STÉPHANIE**.

149. As a direct and legal result of the wrongful acts and/or omissions of **ROSEMOUNT** set forth above, **PLAINTIFF** and her family suffered and continue to suffer the loss of love, society, solace, companionship, comfort, care, assistance, protection, affection and/or moral support from **STÉPHANIE**, as well as other pecuniary injuries including grief, sorrow, and mental suffering, in amounts to be determined at trial.

150. As a further direct and legal result of the wrongful conduct of **ROSEMOUNT** set forth above, **PLAINTIFF** and her family incurred or will incur memorial, funeral and/or burial expenses in amounts according to proof at trial.

151. As a further direct and legal result of the wrongful conduct of **ROSEMOUNT** set forth above, **PLAINTIFF** and her family suffered economic losses, including but not limited to the loss of financial support, and/or the loss of household services in amounts according to proof at trial.

COUNT VI
NEGLIGENCE AND WILLFUL WANTON MISCONDUCT
(ROSEMOUNT AEROSPACE, INC.)

152. **PLAINTIFF** hereby incorporates and realleges each of the preceding paragraphs as though fully set forth herein.

153. At all times herein relevant, **ROSEMOUNT** owed a duty to the public and the passengers and flight crews of **BOEING** 737 MAX 8 airplanes to use reasonable care in designing, manufacturing, assembling and testing the AOA sensors installed on those airplanes, including the

737 MAX 8 used in Flight 302, so as to not to cause injury and death.

154. **ROSEMOUNT** breached this duty in designing and manufacturing the AOA sensors installed on the 737 MAX 8 aircraft used in the Ethiopian Airlines Flight 302 and in its work with **BOEING** to incorporate them into such aircraft.

155. As a direct and proximate result of one or more of **ROSEMOUNT**'s negligent acts and omissions, Flight 302 crashed, killing **STÉPHANIE** and all others on board.

156. As a direct and legal result of the wrongful acts and/or omissions of **ROSEMOUNT** set forth above, **STÉPHANIE** suffered pre-impact injury and death, including fear of impending and imminent death, and **PLAINTIFF** and her family have been damaged by the death of **STÉPHANIE**.

157. As a direct and legal result of the wrongful acts and/or omissions of **ROSEMOUNT** set forth above, **PLAINTIFF** and her family suffered and continue to suffer the loss of love, society, solace, companionship, comfort, care, assistance, protection, affection and/or moral support from **STÉPHANIE**, as well as other pecuniary injuries including grief, sorrow, and mental suffering, in amounts to be determined at trial.

158. As a further direct and legal result of the wrongful conduct of **ROSEMOUNT** set forth above, **PLAINTIFF** and her family incurred or will incur memorial, funeral and/or burial expenses in amounts according to proof at trial.

159. As a further direct and legal result of the wrongful conduct of **ROSEMOUNT** set forth above, **PLAINTIFF** and her family suffered economic losses, including but not limited to the loss of financial support, and/or the loss of household services in amounts according to proof at trial.

COUNT VII
BREACH OF WARRANTY
(ROSEMOUNT AEROSPACE, INC.)

160. **PLAINTIFF** hereby incorporates and realleges each of the preceding paragraphs as though fully set forth herein.

161. **ROSEMOUNT** expressly and/or impliedly warranted and represented that the AOA sensors it designed, manufactured, tested and sold for use in **BOEING** 737 MAX 8 airplanes, including the airplane used in Ethiopian Airlines Flight 302, were airworthy, of merchantable quality, and safe for the purpose of commercial air travel.

162. **ROSEMOUNT** breached its express and/or implied warranties because its AOA sensors installed on the 737 MAX8 used in Ethiopian Airlines Flight 302 were not airworthy, were not of merchantable quality, and were not safe to be used for commercial air travel; in particular, their high rate of failure made them unsafe to be used as a single-point trigger for automated systems like MCAS.

163. The crew members and passengers of Ethiopian Airlines Flight 302, including **STÉPHANIE**, were intended third-party beneficiaries of **ROSEMOUNT's** warranties.

164. **STÉPHANIE**, as a passenger aboard Ethiopian Airlines Flight 302, reasonably relied on **ROSEMOUNT's** warranties to her detriment.

165. As a direct and legal result of **ROSEMOUNT's** breach of its warranties, **STÉPHANIE** suffered pre-impact injury and death, including fear of impending and imminent death, and **PLAINTIFF** has been damaged by the death of **STÉPHANIE**.

166. As a direct and legal result of **ROSEMOUNT**'S breach of its warranties, **PLAINTIFF** and her family suffered and continue to suffer the loss of love, society, solace, companionship, comfort, care, assistance, protection, affection and/or moral support from

STÉPHANIE, as well as other pecuniary injuries including grief, sorrow, and mental suffering, in amounts to be determined at trial.

167. As a direct and legal result of **ROSEMOUNT's** breach of its warranties, **PLAINTIFF** and her family incurred or will incur memorial, funeral and/or burial expenses in amounts according to proof at trial.

168. As a direct and legal result of **ROSEMOUNT's** breach of its warranties, **PLAINTIFF** and her family suffered economic losses, including but not limited to the loss of financial support, and/or the loss of household services in amounts according to proof at trial.

PRAYER FOR RELIEF

WHEREFORE, **PLAINTIFF** demands judgment against the Defendants **BOEING** and **ROSEMOUNT**, and each of them as follows:

A. For general damages in an amount according to proof at trial and beyond the jurisdictional minimum of this Court;

B. For economic and property losses in an amount according to proof at trial;

C. For damages for the Estate of **STÉPHANIE LACROIX** due to pre-impact injuries and losses;

D. For interest upon any judgment entered as provided by law;

E. For all costs of suit incurred herein;

F. For such other and further relief as the court may deem just and proper.

WHEREFORE, **PLAINTIFF** demands judgment against **BOEING** for exemplary damages in an amount in accord with the proof.

VIII. JURY DEMAND

PLAINTIFF demands a trial by jury as to all claims in this action.

Dated: June 5, 2019

Respectfully Submitted,

/s/ Mark S. Dym
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Matthew J. Piers
Mark B. Weiner
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