UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

Christine Monahan; Renee Iannotti; and Lillian Taylor, individually and on behalf of all others similarly situated,

Plaintiffs,

Case No. 6:21-cv-00887

v.

JURY TRIAL DEMANDED

Southwest Airlines Company, a Texas corporation,

Defendant.

CLASS ACTION COMPLAINT

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Plaintiffs Christine Monahan, Renee Iannotti, and Lillian Taylor (collectively, "Plaintiffs"), on behalf of themselves and all others similarly situated, through their undersigned attorneys, hereby bring this action and allege as follows:

NATURE OF THE CASE

I. INTRODUCTION

- 1. Plaintiffs bring this lawsuit on behalf of themselves and all others similarly situated, the Class, to remedy contractual breaches by Defendant Southwest Airlines Company ("Southwest"). Southwest's contractual breaches do not involve conduct violating some obscure corner of the contract of carriage ("CoC") between it and its customers or some nice-but-not-essential aspects of the flight experience such as food service or onboard entertainment. Rather, Southwest's contractual breaches go to the heart of its transaction with its passengers the provision of a safe flight aboard a safe airplane. As alleged herein, Southwest breached the CoC with its passengers by flying the unsafe, non-airworthy, and defective Boeing 737 MAX, by not sufficiently training its pilots to fly the 737 MAX, and by violating Federal Aviation Administration ("FAA") regulations.
- 2. Historically, the coordination between regulatory oversight by the FAA and the aviation industry has achieved admirable records of safety and reliability in commercial airline operations, such that statistically, air travel remains among the safest forms of transportation in the country. But as discussed further herein, the case of the 737 MAX presents a rare and egregious departure from that record. The 737 MAX was so dangerous and unsafe that, after the crashes of Lion Air Flight 610 ("Flight 610") on October 29, 2018, and Ethiopian Airlines Flight 302 ("Flight

302") on March 10, 2019, the FAA, on March 13, 2019, grounded the 737 MAX.¹ Similarly, on March 12, 2019, the European Union Aviation Safety Agency ("EASA") ordered the suspension of all 737 MAX flight operations into, within, and out of Europe.

3. As the world would come to learn as the 737 MAX debacle played out, the 737 MAX's flawed and unsafe design centered on a defective avionics system known as the Maneuvering Characteristics Augmentation System ("MCAS"), which was not disclosed to Southwest's pilots who flew the 737 MAX. The MCAS activated automatically when an angle of attack ("AoA") sensor on the plane communicated to the MCAS that the plane's AoA (*i.e.*, the angle between the wing and the direction of the oncoming air) was too steep and thus the wings might lose lift and the plane could stall. On receiving that information, the MCAS would automatically, and without notice to the pilots, relentlessly push the plane's nose downwards despite any countermands from the pilots to pull the nose upwards. The MCAS played a prominent role in causing the fatal crashes of Flight 610 and Flight 302.

A. Flight 610

4. On October 29, 2018, at 6:20 a.m., Flight 610 takes off in good weather from Jakarta's Soekarno-Hatta International Airport on route to Bangka Island. The flight has 189 people on board, including 181 passengers, two pilots, and six flight attendants. About two minutes after takeoff, a sensor indicates that the AoA is too high and the plane then plummets from about 2,100 feet to 1,500 feet above sea level. At this time, the plane's two AoA sensors are radically disagreeing about the plane's AoA – one saying the plane is flying with its nose pointing

¹ Boeing makes two 737 MAX variants, the 737 MAX 8 and 737 MAX 9. All references herein to "737 MAX" refer to the 737 MAX variants owned and operated by Southwest, which comprised at least the 737 MAX 8 as of the FAA's March 13, 2019 grounding order.

18 degrees up, the other saying it is flying with the nose 3 degrees down. The plane begins to climb steeply again, ascending from 1,500 to 5,500 feet, in two minutes.

- 5. Five minutes into the flight, the MCAS is continuing to receive faulty AoA sensor data that the AoA is too steep and begins to push the plane's nose down for two seconds. The pilots, not knowing about the MCAS system, begin trying to push the nose up for six seconds. The passengers are experiencing a hellish roller coaster. The MCAS activates six more times in the next two minutes, pushing the plane's nose down as the pilots then struggle to push the nose up again. One can only imagine the fear, panic, and terror of the passengers as the plane fitfully plunges and rises for reasons utterly unknown to them and out of their control. Items and perhaps people are falling and flying throughout the cabin. People are screaming, crying, praying.
- 6. The MCAS activates four more times in the following minute. Each time the pilot tries to override the MCAS, yet the horrifying convulsions of the plane continue unabated. The MCAS activates twice more in the next minute. The pilots are struggling to regain control of the airplane. The MCAS activates three more times in less than a minute. The plane dives 1,000 feet in 30 seconds. Many of the passengers must understand at this point that they are in mortal peril. The plane is seesawing out of control. The plane climbs 600 feet, but then the MCAS activates twice more.
- 7. The torturous rollercoaster for the passengers continues. The MCAS activates three more times in less than a minute. The gyrations continue. The MCAS activates twice more in the next twelve seconds. The gyrations become even more sickening, nose-diving hundreds of feet in a few seconds, then rocketing upwards again. And again. For the passengers, each minute must feel like hours of agony. But the pilots are losing the battle for control of the airplane.

8. The plane plummets 400 feet in seconds, then shoots upwards, but for the final time. The pilots have lost the struggle, the MCAS has taken over the plane. The plane begins descending again, the MCAS activates again, and this time the rate of descent starts to accelerate. Only a few seconds later, the plane's rate of descent increases rapidly. The plane is plunging toward the ocean at more than 10,000 feet per minute. The plane and its passengers are in freefall. Passengers are succumbing to panic and G-forces. The conscious ones are screaming and crying in absolute horror, at this point knowing for certain that they are about to die in ghastly violence. As if in mockery, the MCAS activates for one final time. One second later, the flight and cockpit voice recorders stop working. The plane has crashed into the Java Sea with such force that even the strongest parts of the fuselage were pulverized into powder. All aboard are dead.

B. Flight 302

- 9. On March 10, 2019, Flight 302 takes off from Addis Ababa, Ethiopia, bound for Nairobi, Kenya. Among the 157 people aboard are the Captain, Yared Getachew, the First Officer, Ahmed Nur Mohammod Nur, six flight attendants, and more than 100 passengers. The flight lifts off at 8:38 a.m. local time. At 8:44 a.m., all aboard are dead. What occurred in that horrifying six minutes mirrored the torturous experiences of those lost on Flight 610.
- 10. Roughly one minute after takeoff, and only hundreds of feet from the ground, the airplane begins exhibiting uncontrolled rolling and porpoising behavior. Captain Getachew asks First Officer Nur to radio the control tower to report "control problems." The MCAS, unknown to the pilots, activates immediately after this radio call, abruptly pitching the plane's nose downward, causing a sensation much like freefalling to the frightened passengers aboard.
- 11. Over the next 30 seconds, the Captain and First Officer react by attempting to pull the aircraft out of the dive using the yoke and the trim switches at their thumbs. They do not and

cannot know that their operation of the trim switch suspends the MCAS briefly but that the MCAS will automatically re-engage shortly afterward, when it will pitch the nose down yet further. They are in a tug-of-war with what to them is a mysterious control problem. They are unaware that this struggle will recur every time they hold the trim switches long enough in their doomed attempt to recover control.

- 12. Only seconds after the MCAS has activated, the Captain and First Officer conclude that they must be experiencing a runaway stabilizer. They consult their emergency procedures. The cockpit audio records the flightcrew agreeing to activate the "Stab trim cut-out," as their emergency procedures instruct them to do. This cuts power to the electrical systems that drive the horizontal stabilizer, but also cuts the electrical power that runs the MCAS. To recover the aircraft from the dive, they must now manually crank control wheels that operate pulley systems connected to the stabilizer while maintaining exhausting physical force on the yoke. The aerodynamic forces on the stabilizer make this a brutal effort, worsened by the fact that the aircraft's throttle remains at full power from take-off.
- 13. The passengers, clearly aware that something is catastrophically wrong, experience a terrifying series of freefalls and uncontrolled and sudden lurches, as the plane begins a final, near-vertical dive toward the ground at hundreds of miles an hour beyond the aircraft's design tolerances. The terrified passengers are trapped in a metal tube, now hurtling earthward at speeds generating immense aerodynamic forces that threaten to tear the plane apart. Many of them surely understand through the horror that these are their last moments alive.
- 14. Panicked, Captain Getachew decides to reactivate the electrical power to the trim switch, in the hopes that this will allow him to control the aircraft's pitch. However, flipping this switch back on not only restores his trim switch controls, but, unknown to the pilots, it also powers

the MCAS. Like a horror movie in which the monster returns to life, the MCAS re-engages, driving the nose down yet again. Captain Getachew makes several efforts to operate the trim switch, all unavailing. At approximately 8:44 a.m. local time, less than six minutes after takeoff, Flight 302 plane impacts the ground at 700 mph, killing all aboard. As an eyewitness on the ground observed: "It went straight into the ground with its nose. It then exploded."

C. Southwest Breached Its Promises Relating to Safety

- 15. As alleged herein, Southwest breached its contract with its passengers by flying the unsafe, non-airworthy, and defective Boeing 737 MAX, by not sufficiently training its pilots to fly the 737 MAX, and by violating FAA regulations.
- 16. Terrestrial transportation accidents are typically quick affairs. The average car crash, for example, begins and ends in a matter of seconds. In-flight plane accidents, however, are generally more drawn out and, from that perspective, are far more terrifying. Airplane passengers thousands of feet in the air can know and understand the near-certainty of their impending horrible death for minutes and minutes all the while experiencing brutal terror and utter helplessness. It is a particularly cruel way to die, and an entire system of safety-related regulation and business operations has evolved to ensure that it never happens. Passengers in the United States fully expect and demand safe air travel. They pay taxes for a regulatory regime to assure safe travel, pay airfares to airlines that assure safe travel, and punish unsafe airlines and airplanes by not giving them business.
- 17. Commercial air carriers who wish to remain in business compete by touting their safety-related efforts and results, promising their prospective passengers that their operations and their planes are safe.

- 18. Southwest is one such airline. Southwest sold its customers tickets for air travel that, unsurprisingly, included promises of safety, proper pilot training, and regulatory compliance. Southwest breached its CoC with Plaintiffs and other ticketholders when it provided those ticketholders with potential or actual air travel on the unsafe and non-airworthy Boeing 737 MAX, failed to train and familiarize its own flight crews with the specifics of the 737 MAX's MCAS and related systems, and failed to comply with FAA regulations.
- 19. Plaintiffs and the Class were overcharged by Southwest for their tickets as a result of Southwest's failure to fulfill its promises, such that purchasing a ticket for travel on any route operated by Southwest meant rolling the dice on whether they would be flying on a fatally flawed aircraft the 737 MAX. Plaintiffs and the Class bring this action to remedy this damage caused by Southwest's breach of contract.

PARTIES

- 20. Southwest is a for-profit corporation, organized and existing under the laws of the State of Texas, with its headquarters located at 2702 Love Field Drive, Dallas, Texas 75235.
- 21. Southwest has employees and operations throughout Texas, and operates flights from Dallas Love Field, San Antonio, Houston Hobby and Bush-Intercontinental Airports, Harlingen/South Padre Island, Corpus Christi, Lubbock, Midland/Odessa, El Paso, Austin, and Amarillo.
- 22. Plaintiff Christine Monahan is an individual and a resident and citizen of the Commonwealth of Massachusetts. Monahan purchased Southwest tickets for air travel which occurred between August 29, 2017 and March 13, 2019. As a result of Southwest's breach of its contract with Monahan, she was overcharged for her tickets.

- 23. Plaintiff Renee Iannotti is an individual and a resident and citizen of the Commonwealth of Pennsylvania. Iannotti purchased Southwest tickets for air travel which occurred between August 29, 2017 and March 13, 2019. As a result of Southwest's breach of its contract with Iannotti, she was overcharged for her tickets.
- 24. Plaintiff Lillian Taylor is an individual and a resident and citizen of the State of Georgia. Taylor purchased Southwest tickets for air travel which occurred between August 29, 2017 and March 13, 2019. As a result of Southwest's breach of its contract with Taylor, she was overcharged for her tickets.

JURISDICTION

- 25. This Court can properly exercise subject matter jurisdiction over this dispute under the Class Action Fairness Act of 2005, 28 U.S.C. § 1332(d)(2). This follows where the claims are brought as a class action (including those brought on behalf of a nationwide class) filed under Rule 23 of the Federal Rules of Civil Procedure; the putative class likely comprises at least tens of thousands of putative class members; at least one class member is diverse from Defendant; and the amount in controversy exceeds \$5 million aggregate, exclusive of interest and costs.
- 26. Personal jurisdiction over Southwest is properly asserted in this judicial District, where it maintains an active business presence and regularly conducts business.

VENUE

27. Venue is proper in this District pursuant to at least 28 U.S.C. §§ 1391(b)(1), (b)(2), (b)(3), (c)(2), and (d) because Defendant resides in this District, Defendant is subject to personal jurisdiction in this District, and a substantial part of the acts or omissions giving rise to this Complaint occurred in this District.

FACTS

28. Plaintiffs and the Class reallege and incorporate by reference all preceding paragraphs as though fully set forth herein.

I. SOUTHWEST'S CONTRACTUAL PROMISES

- A. Southwest's Contract of Carriage
- 29. The Southwest CoC in effect when Plaintiffs and the Class purchased their tickets provides that a "[t]icket shall entitle the Passenger to transportation subject to this Contract of Carriage."²
 - 30. The opening section of the CoC provides:

Transportation by Southwest Airlines Co. (hereafter "Carrier") is subject to the following terms and conditions, in addition to any terms and conditions printed on any Ticket, or specified on the Carrier's website. The terms and conditions contained in this *Contract of Carriage* shall govern all published routes and services provided by the Carrier as well as all fares and charges published by the Carrier. This *Contract of Carriage* is subject to applicable laws, regulations and rules imposed by U.S. or foreign governmental agencies. In the event of a conflict between the terms of this Contract and such applicable laws, regulations or rules, the latter shall apply. By purchasing a Ticket or accepting transportation, the Passenger agrees to be bound by all of the following terms and conditions.

31. Southwest's CoC thus provides that "[t]ransportation by [Southwest] is subject to" not only the terms and conditions set forth in the CoC itself but also to "any terms and conditions . . . specified on [Southwest's] website." The CoC also provides that it "is subject to applicable laws, regulations and rules imposed by U.S. . . . governmental agencies." The CoC further provides that "[i]n the event of a conflict between the terms of this Contract and such applicable laws, regulations or rules, the latter shall apply."

² Ex. A, CoC (Rev. 19 effective date of 5/9/17) at 11.

32. Southwest's CoC at Section 9(a)(3) provides that passengers may be placed onboard a substitute aircraft without prior notice:

Flight Schedule Changes. Flight schedules are subject to change without notice, and the times shown on Carrier's published schedules, Tickets, and advertising are not guaranteed. At times, without prior notice to Passengers, Carrier may need to substitute other aircraft and may change, add, or omit intermediate stops.³

33. Accordingly, passengers on Southwest during the relevant period could not be certain what type of aircraft they would be flying on in advance of purchasing their tickets and, indeed, in advance of actually boarding the airplane and taking off.

B. Incorporated Terms and Conditions of the CoC

34. The CoC incorporates by reference additional terms and conditions. One of the incorporated documents containing such terms and conditions is the "Southwest Airlines Customer Service Commitment" ("CSC"). In effect during the period of August 29, 2017 to March 13, 2019 ("Class Period") was revision 17-01, effective as of May 9, 2017, which the CoC expressly acknowledges "is incorporated by reference in this *Contract of Carriage*." The CoC provides that the "CSC further explains, augments, and expands upon Carrier's policies, procedures, methods of operation, **obligations**, and **dedication to Customer safety**, service, and satisfaction in accordance with 14 CFR § 259.5."

1. Terms of the CSC Incorporated into the CoC

35. The CSC provides:

³ *Id.* § 9(a)(3). All emphasis in quoted materials cited in this Complaint has been added unless otherwise specified.

⁴ *Id.* § 10(b)(1).

⁵ *Id*.

While Southwest Airlines always endeavors to operate its flights as scheduled, the first priority of this airline and its Employees, and our first responsibility to you, our valued Customer, is and has always been safety. Since our inception in 1971, we have predicated our daily operational and scheduling decisions on the safety, security, and wellbeing of our Customers, Employees, and equipment. We do not believe that this is an area where you would want or expect us to compromise – for any reason.⁶

- 36. The CSC also provides: "Southwest Airlines is the world's largest operator of Boeing 737s. It is the only type of airplane we fly! This means that all of our Pilots, Flight Attendants, and Mechanics are trained and familiar with every airplane in our fleet."
- 37. Southwest's CSC thus makes promises regarding passenger safety that are incorporated into the CoC. For example, Southwest promises passengers that safety is its "first priority," and that safety is Southwest's "first responsibility" to the passenger. Southwest also promises passengers that at all times, it has "predicated [its] daily operational . . . decisions on the safety, security and well-being of our Customers" Southwest further emphasizes its recognition that passengers neither want nor expect that it would compromise on safety "for any reason."
- 38. In addition, the CSC promises passengers that "all" of Southwest's pilots are trained and familiar with "every" airplane in Southwest's fleet. Because Southwest's fleet includes the 737 MAX, this means that Southwest promises its passengers that "all" of its pilots are "trained and familiar" with the 737 MAX.⁸

⁶ Ex. B, CSC (Rev. 17-01) at 5.

⁷ *Id.* at 13.

⁸ These contractual promises apply to "all published routes" flown by Southwest. *See* Ex. A§ 1(a)(1).

39. Southwest understood the significance and visibility of this promise to passengers because in a version of the CSC effective March 14, 2019 (the day after the FAA's March 13, 2019 grounding order),⁹ Southwest moved the language promising that "that all of our Pilots, Flight Attendants, and Mechanics are trained and familiar with every airplane in our fleet" – which turned out to be a false promise – to a less-prominent place (*i.e.*, to another electronic document hyperlinked to the CSC).¹⁰

2. Incorporated Contractual Terms Provided by Southwest's Safety and Security Commitment

- 40. Southwest's CoC also incorporates by reference "any terms and conditions . . . specified on [Southwest's] website," where Southwest posts its "Safety and Security Commitment" ("SSC"), a document dated January 2017 and in effect and unmodified during the Class Period. The SSC is signed in full signature by Gary Kelly, Southwest's Chairman of the Board and Chief Executive Officer ("CEO"), and Michael Van de Ven, Southwest's Chief Operating Officer.
- 41. In the SSC, Southwest states that its "number one priority" is its commitment to "ensuring the Safety and Security of our Customers" and that "[w]e continually work to create and foster a Culture of Safety and Security that **proactively identifies and manages risks to the operation** and workplace **before they can become injuries, accidents, or incidents.**" Southwest also sets forth its other commitments to safety in the same document, including the following:

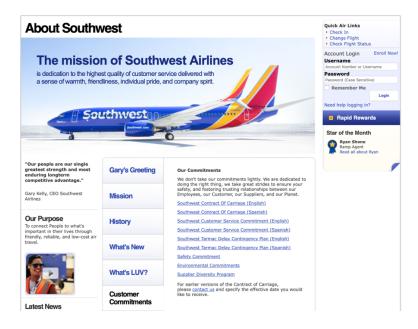
All Southwest Airlines Employees, from Leadership to Frontline Employees, are responsible for:

⁹ See Ex. B.

¹⁰ See Ex. B.

¹¹ See Ex. C, SSC.

- Establishing and upholding the **highest levels of Safety** and Security in our operation and our workplaces
- Complying with all Company Safety and Security policies and procedures, along with all government regulations and guidelines
- **Proactively identifying and reporting hazards in the operation** and contributing to our positive Safety and Security Culture and performance¹²
- C. Southwest's Website Affirms that the CoC, CSC, and SSC Comprise Promises to Customers by Presenting Them on a Section of Its Website Titled "Customer Commitments"
- 42. Southwest has maintained, at all relevant times for this action, a section on its website labelled "Customer Commitments." In this section, Southwest promises its prospective passengers that "[w]e don't take **our commitments** lightly. We are dedicated to doing the right thing, we take great strides **to ensure your safety**, and fostering trusting relationships between our Employees, our Customer, our Suppliers, and our Planet." Following this introduction, Southwest provides links to the CoC, CSC, and SSC, along with other documents:



¹² Ex. C.

- 43. As discussed above, Southwest sets out in this section of its website, its CoC, CSC, and SSC, which together make a number of promises that are incorporated into the contractual agreement Southwest formed with Plaintiffs and members of the Class (defined below at ¶ 188). In this way, Southwest promised Plaintiffs and members of the Class, *inter alia*, that:
 - (a) Southwest's pilots have been trained on and are familiar with every aircraft Southwest operates, including the 737 MAX;
 - (b) Southwest operates safe flights on safe and airworthy aircraft; and
 - (c) Southwest complies with FAA safety regulations.
- 44. Southwest has reaffirmed these safety-related promises to Southwest's customers in a letter regarding the 737 MAX from Southwest's CEO Gary Kelly, in which he promises: "If we had a **cause for doubt of the Safety of our fleet** or any subset of it simply put, the planes would not fly. That is a moral obligation that I share with my fellow Southwest Family Members who work, fly, and travel with our own families on these aircraft. This is not only our profession, career, and livelihoods it's deeply personal to all of us At Southwest, we only operate Boeing 737s, and **our Pilots are highly trained and experienced at flying the aircraft**."
- 45. As explained further below, Southwest has breached these and other promises to Plaintiffs and members of the Class.

II. THE REGULATORY PROCESS OF APPROVING AIRCRAFT DESIGN, PRODUCTION, AND AIRWORTHINESS CERTIFICATION

46. Because, as discussed further below, the process by which the 737 MAX underwent design, development, and regulatory approval was flawed, leading to the approval of the fatally flawed 737 MAX for commercial air travel, a brief discussion of the United States' regulatory process for approval of aircraft is provided here.

- 47. The American public depends on safe and reliable air travel in the United States. To ensure the safety and reliability of aircraft operated in the United States, the FAA sets out extensive regulatory processes governing the design, manufacture, and operation of aircraft. FAA certification of an aircraft for operation broadly involves three stages design certification, production certification, and airworthiness certification.
- 48. When an aircraft design is approved pursuant to FAA regulations, a "type certificate" is issued, which is a certification that an aircraft complies with applicable regulations and is the basis of additional approvals, including those for production and airworthiness. The process of obtaining a new type certificate is lengthy and costly, especially for commercial aircraft like those at issue in this action. Obtaining a new type certificate can take between five and nine years.
- 49. FAA regulations also allow for issuance of an "amended type certificate," which deals with approval of proposed modifications to an existing, FAA-approved design. This is typically a shorter and significantly less costly approval process than that for a wholly new aircraft type certification. The FAA reports that amended type certificates typically require three to five years to complete.
- 50. Under FAA regulations, an aircraft is "airworthy" when it conforms to its United States type certificate and is in condition for safe operation. Conformity with the type certificate means that the aircraft configuration is consistent with the drawings, specifications, and other data that are part of the type certificate, including any supplemental type certificate, repairs, and alterations incorporated into the aircraft.
- 51. The FAA Organization Designation Authorization ("ODA") program allows the FAA to delegate to qualified organizations the authority to issue airworthiness certifications.

Boeing is among the organizations to which the FAA has delegated such authority. During the development of the 737 MAX, the FAA ultimately delegated to Boeing the authority to certify the airworthiness of the MCAS that was used in the 737 MAX.

52. Under the ODA, the FAA remains directly involved in the testing and certification of any new and novel features and technologies through the Flight Standardization Board ("FSB").¹³ But where an ODA partner like Boeing intentionally does not characterize a feature to the FAA as "a new or novel feature or technology," the FAA can be insufficiently aware of such features and thus uninvolved in the testing of the safety impact of said feature.¹⁴ During the development of the 737 MAX, the FAA delegated to Boeing responsibility for conducting the System Safety Analysis¹⁵ of the MCAS. And as discussed further below, the design, development, and regulatory process for the 737 MAX was deeply flawed.

III. FLIGHT CONTROLS OF 737 AIRCRAFT

53. The first 737 launched in 1967 and subsequent generations of the aircraft have been developed over time. The most recent generation of 737 airplanes prior to the 737 MAX was the 737 Next Generation line, which included the 737-600, 737-700, 737-700C, 737-800, 737-900,

¹³ The FAA establishes a FSB for large jet and propeller aircraft, and the FSB's responsibilities include determining pilot training objectives, conducting initial training for manufacturer's pilots and FAA inspectors, publishing recommendations for FAA inspectors to use in approving an airline's training program, and ensuring initial flight crew member competency. *See* https://www.faa.gov/aircraft/air_cert/airworthiness_certification/.

¹⁴ In addition, the EASA relied on the FAA's assessment of the 737 MAX when initially certifying the aircraft and, like the FAA, the EASA did not require additional pilot training on the MCAS.

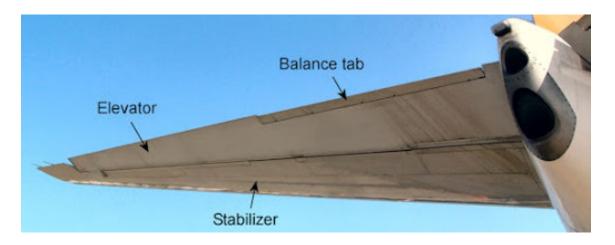
¹⁵ Large passenger aircraft like the 737 must comply with FAA airworthiness regulations to be certified for operation. *See* 14 CFR § 25.1309. The FAA provides guidelines showing compliance with airworthiness regulations in Advisory Circular ("AC") 25.1309-1A, "Systems Design and Analysis." Aircraft manufacturers conduct Systems Safety Analyses of their aircraft for submission to FAA inspectors as a means of demonstrating safety assessments consistent with the FAA's guidance in AC 25.1309-1A.

and the 737-900ER variants (collectively, "737 NG"). Generations of the 737 prior to the 737 MAX are collectively referred to herein as "Legacy 737 Aircraft."

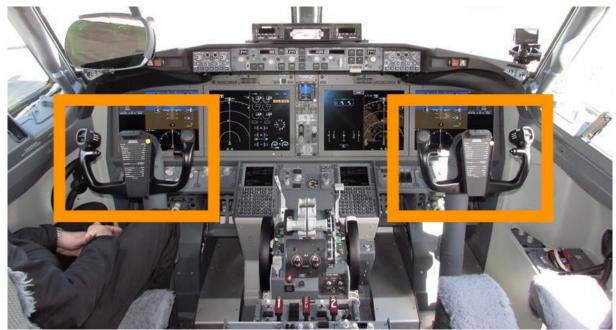
- 54. As alleged above, the MCAS played a prominent role in making the 737 MAX an unsafe and non-airworthy airplane, including causing the fatal crashes of Flight 610 and Flight 302. The MCAS operated by taking control of the 737 MAX's horizontal stabilizer, one of the plane's "control surfaces."
- 55. Like all modern jet aircraft, 737 aircraft have "control surfaces" that allow the pilots to control the orientation of the plane. These include the ailerons, which control the roll of the airplane; the rudder, which controls the yaw of the airplane; and the elevator, which controls the pitch:



56. The elevator on all 737 airplanes is mounted on the trailing edge of the horizontal stabilizer, which, together with the elevator, comprises the small wing-like feature near the rear of the aircraft:



57. 737 pilots use a yoke mounted on a control column to fly the aircraft (indicated in the orange boxes in image below):

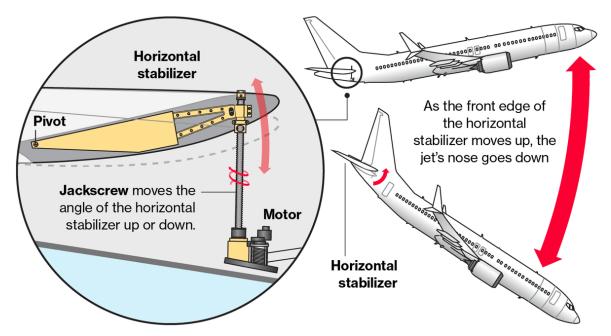


- 58. Pulling backwards on the control column causes the elevator to deflect upwards, which in turn pushes the nose of the aircraft upwards. Pushing forward on the control causes the elevator to deflect downwards, which in turn pushes the nose of the aircraft downwards.
- 59. While the elevator, mounted on the rear of the horizontal stabilizer, may deflect up and down, the entire stabilizer may also deflect up and down. As shown in the depiction below, the leading edge of the stabilizer may deflect upwards (in the depiction by up to 4 degrees from neutral), pushing the nose "DOWN," or downwards (in the depiction by up to 11 degrees from neutral), pushing the nose "UP."



- 60. Like Legacy 737 Aircraft, the 737 MAX uses a combination of manual and electronic controls to operate the plane's control surfaces, including the elevator and the horizontal stabilizer. When pilots push or pull the control column, mechanical cables that are connected to the control column transfer a pilot's control input to a mechanism in the tail of the 737 that physically moves the elevator in response to the pilot's input via hydraulic actuators. This mechanism also provides feedback to the pilots on the forces affecting the control surfaces by increasing or decreasing the force the pilot needs to exert to move the control column forward or backward.
- 61. Because it can be physically taxing for pilots to maintain constant force on the control column so as to maintain the position of the elevators, all 737s allow the pilots to trim the horizontal stabilizer up or down to keep the airplane in a given pitch without the need to keep constant physical pressure on the control column. Thus, 737 pilots typically trim the aircraft's pitch using electronic thumb switches located on the yoke. The operation of these switches causes

an electric motor system in the tail of the aircraft to rotate a "jackscrew" that, in turn, moves the entire horizontal stabilizer up or down as desired, allowing the pilot to return the elevators to a more neutral position.

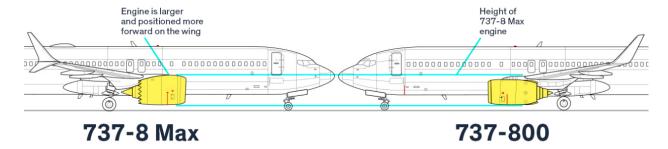


62. In the event that the electrical system controlling the jackscrew fails, pilots also have the ability to manually trim the horizontal stabilizer by physically rotating (by manual crank) trim wheels, which are located in the cockpit (indicated by the orange box in below image) and are mechanically linked via cables to the horizontal stabilizer trim mechanism:

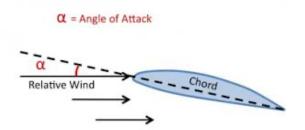


IV. THE 737 MAX ON WHICH PLAINTIFFS AND THE CLASS POTENTIALLY OR ACTUALLY FLEW WAS UNSAFE AND NON-AIRWORTHY

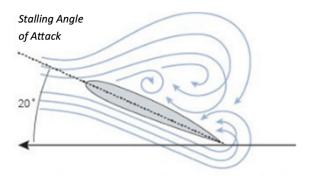
- 63. The history of the 737 MAX's flawed design, development, and regulatory approval process has been well-documented and is briefly reviewed herein.
- 64. The Boeing 737 MAX was designed with a goal of, *inter alia*, improving fuel efficiency. To make the new 737 MAX more fuel efficient, Boeing needed bigger engines. But because of the way the 737 sits low to the ground, bigger engines, mounted in the same place as the engines being replaced, would have insufficient ground clearance. To allow integration of the new larger LEAP-1B engines, the design called for, among other things, mounting the engines farther forward and higher on the wings so as to raise the engines to a higher position on the plane, and thereby maintain the necessary ground clearance.



65. However, moving the engines forward and higher on the wings also changed the aerodynamics of the plane by potentially causing the aircraft to pitch upward. Pitching upward can increase the airplane's angle of attack ("AoA"), which is the angle at which the chord (a straight line from the leading edge to the trailing edge) of an aircraft's wing meets the relative wind:

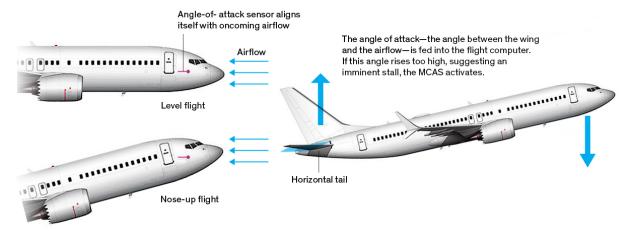


66. To generate lift, air must flow over and under an airplane's wings. As an aircraft pitches upward and the AoA becomes too high, the airflow over the plane's wings separates from the wing's upper surface, backfilling, burbling, and eddying. The wings begin to lose lift and the risk of an aerodynamic stall increases:



- 67. A stall is dangerous, as it means that the aircraft loses lift and can become perilously unstable. Under such conditions, pilots may be unable to recover control of the aircraft and crashes causing serious injury or death can result. FAA regulations require that airworthy vessels not experience abnormal upward pitching and that the aircraft's design ensure that pilots can prevent such stalling by the normal use of the aircraft's controls.
- 68. To counter the 737 MAX's tendency to pitch upward, Boeing introduced the MCAS to the 737 MAX design. The MCAS was intended to compensate for the inherent upward pitching tendency of the 737 MAX caused by the new placement of the larger engines. This system was purportedly meant to operate without the need for pilot input, freeing the pilot to focus on other aspects of operating the aircraft.

How the new Max flight-control system (MCAS) operates to prevent a stall



A. The 737 MAX Was Unsafe and Non-Airworthy in Its Design and Operation

69. The 737 MAX was unsafe and non-airworthy – fatally so. In fact, there were multiple problems with the design and operation of the 737 MAX that made the airplane unsafe and non-airworthy at the time Plaintiffs and the Class agreed to the CoC and purchased their flight tickets.¹⁶

1. The Single Sensor Problem

70. Although 737 MAX aircraft have two AoA sensors to detect the aircraft's AoA, the MCAS inexplicably drew on data from only one of the sensors. If the single sensor was damaged, malfunctioned, or was incorrectly calibrated, it would send bad data to the MCAS. As the FAA Report determined: "Erroneous data from a single AOA sensor activated MCAS and subsequently caused airplane nose-down trim of the horizontal stabilizer."

 $^{^{16}}$ A November 18, 2020 report from the FAA ("FAA Report") highlighted critical problems with the 737 MAX's MCAS and related systems that would have to be resolved before the FAA could approve the 737 MAX to re-enter service.

https://www.faa.gov/foia/electronic_reading_room/boeing_reading_room/media/737_RTS_Sum_mary.pdf.

- 71. In fact, the original version of the MCAS was activated only if both AoA sensors indicated that the nose was pitched upward at a dangerous level. However, during safety testing, after assessing the possibility that the AoA sensor would fail and cause the MCAS to fail, Boeing determined that connecting the MCAS to just one AoA sensor would be an acceptable risk. This was in part dependent on the assumption, later shown to be faulty, that a pilot would be able to respond to an erroneous control input by the MCAS within seconds.
- 72. Based on Boeing's decision to connect the MCAS to just one AoA sensor, if a single sensor sent faulty information to the MCAS (*e.g.*, indicating that the AoA was high when it was not), then the MCAS would anticipate a stall and, without the knowledge of the pilot, repeatedly pitch the nose of the aircraft down automatically, even if the pilot repeatedly tried to pitch the nose upward again.
- 73. Almost every system in a sophisticated aircraft like the 737 MAX is designed with redundancies. Designing the MAX to use data from a single AoA sensor to determine the AoA was at odds with this basic approach. As Peter Lemme, one of Boeing's former engineers who helped design systems for the 757 and 767, stated: "From the beginning it should have been a fail-safe design, which would have relied on two inputs to make sure that you weren't sensitive to one failure."
- 74. This design flaw led directly to the crashes of Flight 610 and Flight 302. In both cases, a faulty single AoA sensor sent bad information to the MCAS, which then took control of the plane and pushed the plane downwards until it crashed.
- 75. In addition to failing to build redundancies, the 737 MAX was never flight-tested to determine how the MCAS would respond if a sensor malfunction occurred, given the system's dependence on the single input design.

76. After the grounding of the 737 MAX on March 13, 2019, the airplane was redesigned in order to be made airworthy and to remedy the above issues that existed at the time Plaintiffs and the Class purchased their tickets. Among the changes made was the requirement that the MCAS use sensor input from both AoA sensors.

2. The Failure Rate Problem

- 77. The danger of the Single Sensor Problem was multiplied by a defective design that relied upon input from an unreliable sensor prone to failure. Indeed, as of mid-2019 (after grounding the 737 MAX) the FAA received at least 216 reports of AoA sensors failing or having been repaired, replaced, or adjusted since 2004, according to data from the FAA's Service Difficulty Reporting website. Approximately one-fifth of the complaints involved Boeing planes, including incidents in which AoA sensors were frozen, improperly installed, struck by lightning, or even hit by flying birds. Some of the reported AoA sensor failures led to stall warnings, forcing pilots to abort takeoffs or perform emergency landings. The 737 MAX MCAS was nonetheless designed to accept input from only one AoA sensor, despite broad awareness of the failure rate of such sensors and thus the attendant risks stemming from sensor failure.
- 78. The danger of relying on a single data input is further reinforced by recent events in which even multiple data inputs from similar sources can lead to crashes. For example, in 2009, Air France Flight 447 crashed in the mid-Atlantic due to a chain of events begun by the clogging of the aircraft's pitot tubes, which measure airspeed, falsely telling the crew that the plane was losing speed and automatically disengaging the autopilot. The investigation revealed numerous other safety incidents caused by the failure of the pitot tubes to accurately measure airspeed. If erroneous data from a redundant measuring system can lead to crashes, then any design that relied on potentially erroneous data from a single measuring instrument was highly likely to lead to crashes. And it did. Indeed, a later FAA analysis concluded that the MCAS would on average

cause a major air disaster every two to three years, a seeming underestimate given the Lion Air and Ethiopian Airlines crashes less than five months apart.

- 79. Given a known rate of failure of AoA sensors and the design of the MCAS as installed on the 737 MAX, the specifications for the airplane should have at a minimum required additional AoA sensors to account for the chance of individual sensor failure. This is particularly true where the MCAS was designed to essentially commandeer the airplane and could do so upon potentially flawed data from those sensors. As an example, Boeing 787s have five pitot tubes to measure airspeed, in addition to GPS-based speed-over-ground measurements.
- 80. Further, because the MCAS was designed to wrest control of the aircraft away from the pilots upon potentially flawed data input from AoA sensors, the system ought to have had an alternative method of determining the AoA other than AoA sensors. Instead, the MCAS was designed to commandeer the plane based on only one type of sensor with a known rate of failure, as shown by the Lion Air and Ethiopian Airlines crashes.
- 81. The FAA has confirmed, via two directives regarding the AoA sensors for various Boeing aircraft, that the safety risks stemming from this fatal design involving a single, vulnerable AoA sensor, were known before the 737 MAX was launched. As the former managing director of the National Transportation Safety Board ("NTSB") has explained, AoA sensors are fundamentally the same across different aircraft models. The 737 MAX was thus designed and released despite the knowledge of the risk of using a single AoA sensor for the MCAS system.
- 82. After the grounding of the 737 MAX on March 13, 2019, the airplane was redesigned in order to be made airworthy. Among the changes made was the requirement that the MCAS use sensor input from both AoA sensors to remedy the safety issues present at the time Plaintiffs and the Class purchased their tickets.

3. The AoA Disagree Problem

83. Because it was known that AoA sensors were not always accurate, Boeing had designed a system that could be used to determine whether the two AoA sensors on the aircraft disagreed with each other. The 737 MAX could be fitted with an indicator that would appear on the pilot's instrumentation if the two AoA sensors disagreed with each other, indicating that one of the sensors may have malfunctioned (the "AoA Disagree Indicator"). Below is a depiction of the 737 MAX pilots' display showing the location of the AoA Disagree Indicator, as well as the location of the optional gauge which could show to the pilots the plane's AoA (the "AoA Gauge"):

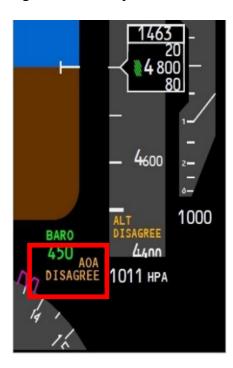


- 84. The AoA Disagree Indicator was an important feature that would alert a pilot when one of the AoA sensors might not be working correctly, and to adjust piloting decisions accordingly.
- 85. The AoA Disagree Indicator, however, was merely an optional feature on the 737 MAX, meaning airlines would have to pay more to have it enabled. As the FAA Report concluded: "The AOA DISAGREE alert message on the Primary Flight Display is not functional unless the AOA indicator option was chosen by the airline. This alert message is intended to be standard on all 737 MAX airplanes." For illustration, below at left is an example of the display presented to a

pilot on 737 MAX that lacks the AoA Gauge and the AoA Disagree Indicator, while below at right is an example of the display as presented to the pilot that shows both the AoA Gauge and the AoA Disagree Indicator (when activated):



86. The display on the 737 NG was also configured with a standard AoA Disagree Indicator (and could also be configured with an optional AoA Gauge not depicted below):



- 87. Pilots trained on and familiar with the 737 NG variants would have expected that the display in the 737 MAX would operate as it had in the 737 NG, displaying the AoA Disagree indicator if it were triggered. This is true whether or not a customer like Southwest also opted to implement the AoA Indicator, because the AoA Disagree Indicator was a standard feature in the 737 NG.
- 88. Boeing's own design requirements included the AoA Disagree Indicator as a standard feature in the 737 MAX. However, the AoA Disagree Indicator was ultimately implemented as a non-standard feature on the 737 MAX because of a software error Boeing discovered in 2017, several months after it had begun delivery of the aircraft:

The Boeing design requirements for the 737 MAX included the AoA Disagree alert as a standard, standalone feature, in keeping with Boeing's fundamental design philosophy of retaining commonality with the 737 NG. In 2017, within several months after beginning 737 MAX deliveries, engineers at Boeing identified that the 737 MAX display system software did not correctly meet the AoA Disagree alert requirements. The software delivered to Boeing linked the AoA Disagree alert to the AoA indicator, which is an optional feature on the MAX and the NG. Accordingly, the software activated the AoA Disagree alert only if an airline opted for the AoA indicator.

- 89. Put simply, the 737 MAX was delivered as a product that did not meet its own specifications, and in doing so Boeing effectively made a critical safety feature optional.
- 90. Southwest's purchase agreements with Boeing for the 737 MAX, redacted versions of which are publicly available from its SEC filings, specified all features that were installed in the aircraft delivered to Southwest, and Southwest was on notice of and had the opportunity to assess and test any discrepancies in the aircraft and/or its specifications. Had Southwest conducted adequate inspections upon delivery of the aircraft, it would have discovered, *inter alia*, that the AoA Disagree Indicator that it had paid for was not, in fact, operational in the 737 MAX aircraft that it purchased.

- 91. The AoA Disagree Indicator was critical to the safe flight of the 737 MAX because it could reveal a failure of the AoA sensor, a failure-prone sensor that was the sole input into MCAS. But by effectively making this critical safety feature optional, the aircraft was rendered unsafe without the feature. Indeed, pilots would have no direct way of comparing sensor readings from the two AoA sensors to determine whether a malfunction had even occurred without an AoA Disagree system, keeping pilots ill-informed regarding important flight safety information (consistent with the theme of withholding crucial information from pilots, as explained further below). This is particularly true where pilots would have, based on their training and familiarity with the 737 NG, expected that the AoA Disagree Indicator would appear if there were differences in AoA sensor inputs. The lack of the AoA Disagree Indicator could easily leave such pilots with the impression that AoA sensor inputs were not faulty, complicating their troubleshooting efforts under potentially emergency circumstances and with little time to waste before a fatal crash.
- 92. After the grounding of the 737 MAX on March 13, 2019, the airplane was redesigned in order to be made airworthy and to remedy the above-mentioned safety issues present when Plaintiffs and the Class purchased their flights and agreed to the CoC. Among the changes made were the requirement that the AoA Disagree Indicator be made a standard feature on the 737 MAX, and the flightcrew procedures have been revised to rely on this indicator when guiding flightcrews' actions.

4. The Cut-Out Switch Problem

93. In both earlier 737 models and 737 MAX, a set of two "STAB TRIM" (meaning "Stabilizer Trim") cut-out switches are present in the cockpit between the pilot and co-pilot. In the earlier 737s, with which Southwest's pilots were trained and familiar, the two cut-out switches (*i.e.*, switches that cut off power to certain systems) perform different functions.



- 94. The left switch (labeled "MAIN ELECT") deactivates the trim buttons on the yoke that pilots use to adjust the horizontal stabilizer. The right switch, labeled "AUTO PILOT," deactivated only automated controls for the horizontal stabilizer.
- 95. The combined result of these functions was that, in earlier 737s, pilots had the ability to selectively deactivate auto-pilot functions while preserving the ability to control the aircraft's pitch using the trim switches on the yoke.
- 96. But the labelling and function of these "STAB TRIM" switches were different in the 737 MAX.



- 97. Regarding labelling, the left switch was now labeled "PRI" (for "Primary") and the left switch was labeled "B/U" (for "Backup"). Regarding function, unlike in the 737 NG, flipping either switch would now deactivate all electric controls for the stabilizer, including the power for the MCAS, as well as power for the trim controls on the yoke.
- 98. The 737 pilots, however, were informed only about the change in labeling, not the change in function. The FAA's Flight Standardization Board Report, detailing to all 737 pilots the various differences between systems in the previous generation 737s and the 737 MAX, noted only the change in labeling of the switches: "Stab Trim cutout switches panel nomenclature." The report never mentioned that the functions of these switches had also changed.
- 99. This change in the function of the cut-out switches from the 737 NG to the 737 MAX meant that pilots operating the 737 MAX did not have the ability to selectively deactivate automatic controls without also losing the ability to control the stabilizer using the trim buttons on the yoke. Pilots following the existing procedures to control a runaway stabilizer (an issue that was possible even prior to the MCAS) would have been trained to cut out both switches, which was precisely what the flightcrew of the Lion Air crash did.
- 100. But if a pilot has not been able to regain control of the aircraft by means of the manual trim wheels after cutting out both switches, particularly given the physical strain that can require, a pilot might wish to attempt to restore power to the electric trim switches. A pilot who is unaware of the MCAS, but familiar with the operation of the cut-out switches in the 737 NG, might attempt to restore control to just the trim switches on the yoke by operating the left cut-out switch, as Captain Getachew of Flight 302 apparently did, mistakenly believing this would also keep automatic controls deactivated. But in the 737 MAX, this would also reactivate MCAS and doom the aircraft.



Center console of 737 MAX, with manual stabilizer trim wheels at left and right. Cut-out switches are at lower right.

5. The False Equivalency Problem

- 101. The 737 MAX was ostensibly "designed to handle and feel the same to the pilot as the 737 NG." This supposed similarity was among the bases for not requiring updates to pilot training on the 737 MAX. However, the planes in actuality had significant differences between them.
- 102. For example, once in a stall, NG and MAX have different characteristics because of the larger engines on the MAX.
- 103. In addition, the 737 NG aircraft implemented a dual AoA sensor system and, unlike the 737 MAX operated by Southwest, had a functional AoA Disagree Indicator. Because Southwest intended that its pilots would be able to operate the 737 MAX without additional

training based on their existing familiarity with the avionics and controls of the 737 NG, Southwest pilots would reasonably assume that the AoA Disagree Indicator in the 737 MAX operated in the same manner as the 737 NG with which they were already familiar, given the absence of any training to the contrary.

- 104. Similarly, as alleged above, the function and labelling of the cut-out switches were changed and Southwest did not inform or train its pilots about these changes to the system.
- 105. As a result, pilots were left with the false impression that the 737 MAX handled and could be operated similarly to the 737 NG, a false impression that could lead to disastrous consequences in certain circumstances.

6. The Secrecy Problem

- 106. When the 737 MAX was delivered, neither Boeing nor Southwest informed the pilots who would operate the airplanes that the MCAS existed. Indeed, the MCAS was designed to operate outside the knowledge of pilots and the nondisclosure of the MCAS was part of the planned rollout of the 737 MAX.
- 107. By failing to disclose the existence of the MCAS to the pilots, the pilots were prevented from developing an understanding of the operation of the MCAS and related systems. For example, pilots were deprived of the opportunity to understand, *inter alia*, that: (i) the MCAS was activated exclusively by the input of a single AoA sensor; (ii) the AoA Disagree function was not functional; (iii) the MCAS would activate without notice to the pilot; (iv) the MCAS would override all ordinary pilot inputs; (v) override of the MCAS would require operating the controls of the 737 MAX in a manner that was inconsistent with the pilots' expectations based on their training and familiarity with the previous generation of 737 aircraft (*see, e.g.*, ¶ 159); and (vi) terrifying consequences could follow from a malfunction.

108. Even without formal training regarding the MCAS, had the MCAS been disclosed to the pilots they could have, through their own pilot experience and/or through self-training, formulated ways to understand whether the MCAS was activating and, if so, how to respond. Moreover, had the MCAS been disclosed, the pilots could have, through their union or otherwise, demanded formal training regarding the MCAS (and otherwise sought to improve or rectify the plane's fatal flaws). Indeed, as the Southwest Airlines Pilots Association ("SWAPA") alleged in a complaint against Boeing:

Had SWAPA known the truth about the 737 MAX aircraft in 2016, it never would have approved the inclusion of the 737 MAX aircraft as a term in its [collective bargaining agreement], and agreed to operate the aircraft for Southwest. Worse still, had SWAPA known the truth about the 737 MAX aircraft in 2016, it would have demanded that Boeing rectify the aircraft's fatal flaws before agreeing to include the aircraft in its [collective bargaining agreement], and to provide its pilots, and all pilots, with the necessary information and training needed to respond to the circumstances that the Lion Air Flight 610 and Ethiopian Airlines Flight 302 pilots encountered nearly three years later."

- 109. Moreover, Boeing's and Southwest's secrecy regarding the MCAS also meant that (as shown below in greater detail at ¶¶ 134-141) the FAA was not sufficiently advised of either the MCAS's existence or its functionality. That lack of information deprived Boeing and Southwest of the insights, inputs, and other benefits that could be bestowed by the FAA in order to reduce or eliminate the defectiveness and dangers of the MCAS and related systems.
- 110. The notoriety of the Lion Air and Ethiopian Airlines crashes began the process of revealing the secret MCAS to 737 MAX pilots and the world at large.

7. The Lack of Training Problem

111. As alleged above, the MCAS was designed to operate outside the knowledge of pilots and the nondisclosure of the MCAS was part of the planned rollout of the 737 MAX. The 737 MAX was ostensibly designed to handle like the 737 NG and as such the design was intended

in part to obviate significant additional pilot training for its operation. The MCAS was thus designed to be concealable and to operate behind the scenes to supposedly make the 737 MAX handle like the 737 NG (though, when activated, the MCAS ended up making the 737 MAX handle like no other commercial airplane on Earth).

- thus not trained to understand what the MCAS was, how it was activated and operated, the circumstances in which it might be mistakenly activated, or how to respond to that activation (including how to disengage it). By hiding the MCAS, Southwest sought to avoid the time and expense of having pilots be trained to fly an airplane with an entirely new functionality. That would avoid transition costs for the new aircraft, such as having to train pilots in simulators, preparing them for failure modes unique to the 737 MAX, and negotiating a collective bargaining agreement with SWAPA that took into account all of the problems associated with the 737 MAX. Southwest's contract of purchase with Boeing incentivized this omission, where Boeing would have to pay Southwest significant refunds if the 737 MAX were to require Southwest pilots to undergo training and simulation before operating the aircraft.
- 113. Thus, not only were those failure modes not actively simulated, they were not tested during the development of the aircraft.
- 114. Accordingly, pilots transitioning to the 737 MAX from prior models were given a short, self-administered online course that did not mention the MCAS at all. The course was the only training pilots received for the new aircraft and in some cases could be completed in under an hour. This training was woefully inadequate. The lack of training created a dangerous safety issue every time a 737 MAX flew.

began the process of revealing the secret MCAS to 737 MAX pilots and the world at large. In addition to the disclosure of this MCAS-related information to 737 MAX pilots, after the grounding of the 737 MAX on March 13, 2019, the FAA also mandated specific pilot training and simulation. The mandated training would need to address elements such as: (i) the MCAS function and conditions of operation; (ii) automatic autopilot disengagement; (iii) manual stabilizer trim operation and trimming techniques, including the effects of airspeed and aerodynamic loads on manual stabilizer trim operations; and (iv) recognition of sensor failure warnings such as the AoA Disagree Indicator. The FAA also mandated simulator training regarding events such as: (i) MCAS activation during an impending stall and recovery; (ii) runaway stabilizer condition that requires the use of manual stabilizer trim; and (iii) operation of all manual trim techniques, among others.

8. The Manual-Disengagement Problem

- 116. When pilots finally started becoming aware of the MCAS after the Flight 610 crash, they learned that the process of disengaging the MCAS was unreasonably complex and onerous, particularly in an emergency situation. Indeed, if a pilot wished to disengage the MCAS, the prescribed method of doing so was absurdly and unnecessarily difficult, particularly under the kind of conditions that would trigger the MCAS to automatically engage.
- 117. As alleged above, to manually shut off the MCAS, the 737 MAX has two cut-out switches located on the cockpit's control stand. $See \ 93$, supra. If either switch is set to CUTOFF, then the autopilot, the MCAS, and the manual electric trim inputs are all disengaged.
- 118. This procedure would mean that all electric trim would be disabled entirely, and a pilot would have to manually trim the airplane with controls subject to physical resistance from

aerodynamic forces on the aircraft. It is therefore possible that an average pilot would not even have the physical strength to operate the manual crank, let alone do so in time to prevent a crash.

- 119. Where a pilot is facing a crisis of a potential nose-down crash into land or water caused by an insistent algorithm, he or she should be able to disengage the MCAS without sacrificing the entire electric trim system.
- 120. Instead, to avoid a crash, Boeing's flawed solution was that the pilot during a crisis would execute a checklist full of manual overrides followed by engaging in a physical struggle with the unaided controls of a large aircraft. It is simply astonishing that Southwest purchased and flew airplanes with the MCAS that engaged and operated in most respects automatically and electronically, yet in the end the system could only be overridden through brute physical strength.
- 121. This design aspect would be problematic and indeed fatal under certain flight conditions. In fact, the risk that aerodynamic forces on the horizontal stabilizer could be too great for pilots to manually control the airplane without the use of the electric trim is even greater after an MCAS-driven nose down emergency. This was a known issue, but the 737 MAX design failed to provide a means of disengaging the MCAS without losing the use of the airplane's electric trim system. In fact, the physical strain required to overcome aerodynamic forces appears to have been one of the many factors leading to the crash of Flight 302.
- 122. Of course, in order to even attempt this procedure, a pilot would have to know of the MCAS's existence, but Southwest failed to tell pilots that the system existed until after the Lion Air crash in late 2018. In other words, for more than a year after the 737 MAX was released, pilots would have been helpless and unaware if the MCAS received erroneous input and repeatedly pushed the nose of the aircraft down. As the FAA Report found: "FDR [Flight Data Recorder] data from [the Lion Air and Ethiopian Airlines] accidents show that the flightcrews were unable

to effectively manage the stabilizer movement and multiple flight deck effects that resulted from the single AOA sensor failure."

123. As noted above, after the grounding of the 737 MAX on March 13, 2019, the FAA mandated certain design changes such as the use of both AoA sensors and the mandatory implementation of the AoA Disagree Indicator to remedy the safety issues present at the time Plaintiffs and the Class purchased their tickets and agreed to the CoC. The FAA also mandated specific pilot training and simulation. The mandated training would need to address elements such as: (i) the MCAS function and conditions of operation; (ii) automatic autopilot disengagement; (iii) manual stabilizer trim operation and trimming techniques, including the effects of airspeed and aerodynamic loads on manual stabilizer trim operations; and (iv) recognition of sensor failure warnings such as the AoA Disagree Indicator. The FAA also mandated simulator training regarding events such as: (i) MCAS activation during an impending stall and recovery; (ii) runaway stabilizer condition that requires the use of manual stabilizer trim; and (iii) operation of all manual trim techniques, among others.

9. The Automatic Throttle Problem

124. Recent reports indicate that software flaws in the MCAS and flight control systems meant that in the event of an AoA sensor failure, the 737 MAX's automatic throttle control could cause the airplane to remain operating at higher speeds than the pilots commanded. Those unexpectedly higher speeds could add to the forces on the control column that the pilots had to overcome, and also meant that if the MCAS commanded the airplane to enter a dive and the automatic throttle control improperly maintained a high airspeed, the pilots had even less time to recover control before impacting the land or water than they might if the plane's airspeed were lower.

10. The Machine-Over-Man Problem

- 125. Perhaps the most egregious and disturbing aspect of the 737 MAX's defective design was the decision to allow the MCAS to commandeer the airplane based on erroneous data input from potentially malfunctioning sensors and thereby functionally ignore repeated pilot input.
- 126. Indeed, the MCAS did not block nose-up and/or trim commands from pilots when they occurred, but then the MCAS, still receiving faulty sensor input, would simply reengage seconds later. As the FAA Report observed: "When a continuous erroneous high AOA sensor value exists, the MCAS control law uses pilot release of the electric trim switch to reset MCAS activation. Once reset, the MCAS system will make another airplane nose-down stabilizer trim command after five seconds. This scenario repeats each time MCAS makes a command and the pilot makes an electric trim command of any duration and releases the trim switch." As the FAA also found, the MCAS disregarded any history of contrary pilot or MCAS input: "All MCAS commands were incremental commands, which moved the horizontal stabilizer a fixed amount, regardless of the current position of the stabilizer. Therefore, multiple MCAS commands resulted in a significant horizontal stabilizer mistrim condition, which the flightcrew could not counter using only elevator control." In other words, because the horizontal stabilizer is a much larger surface than the elevator, it exerts more significant nose-down control authority relative to the elevator, in effect overpowering the pilots' nose-up commands to the elevator.
- 127. Any rationally designed software system would take into account insistent pilot countermands nose-up commands and respond to that input by discontinuing automated nose-down commands (and this has since been done in the redesign of the MCAS).
- 128. In essence, the MCAS was designed to accept and trust all input from a potentially flawed or damaged AoA sensor over any input from the experienced pilots who were flying the

planes. In short, the MCAS fatally treated the pilots, and all input from pilots, as meaningless input, untrustworthy as compared to an error-prone sensor and computer program.

- 129. The 737 MAX's design permitting the MCAS to commandeer the plane was especially egregious because the AoA is a measurement that trained pilots may be able to assess using other information. In particular, the AoA is related to pitch angle and flight path angle, which trained pilots may be able to evaluate or understand even without AoA sensors. Indeed, pilots are trained to also rely on their senses and cockpit sensors other than the AoA Gauge to maintain a safe and controlled pitch attitude of the aircraft.
- 130. The 737 MAX design thus necessarily entrusted the safety of passengers to the MCAS's algorithm over a pilot's judgment and experience, and it was the defective design of the algorithm that directly led to the Lion Air crash and Ethiopian Airlines crash.
- 131. After the grounding of the 737 MAX on March 13, 2019, the airplane was redesigned in order to be made safe and airworthy and to remedy issues present at the time Plaintiffs and the Class purchased their tickets and agreed to the CoC. Among the changes made was a correction to the problem where the MCAS could activate repeatedly, without regard to contrary pilot control inputs, and could continue to move the stabilizer nose-down until it reached its limit of travel. The MCAS now will only generate one nose-down command for a given high AoA event and the MCAS cannot reactivate until after the plane has returned to a low AoA. Additionally, the MCAS, when active, will no longer be permitted to command horizontal stabilizer movement past the point that allows the pilots to control the pitch of the aircraft (through the elevators).
- 132. The multiply defective design of the 737 MAX, including all of the foregoing problems (collectively, the "Safety Problems"), as well as the additional safety failures noted by

the FAA Report, mentioned above, reflected a perfect storm of defective design, violation of regulations, lack of disclosure, and absence of training – all of which resulted in an unsafe and non-airworthy airplane at the time Plaintiffs and the Class agreed to the CoC.

133. Each of the above-described safety issues were present on the Southwest 737 MAX aircraft at the time Plaintiffs and the putative Class members flew during the Class Period. Plaintiffs and the putative Class members did not and could not know at the time they purchased their tickets whether they would be ultimately placed aboard a 737 MAX or instead one of the Legacy 737 Aircraft in Southwest's fleet.

B. Failures in Regulatory and Public Disclosure Compounded the Critical Safety Flaws in the 737 MAX

- 1. The FAA Did Not Have Adequate Awareness of the 737 MAX's Design and Operational Issues
- 134. FAA regulators did not have adequate awareness of many design and operational issues facing the 737 MAX, and there were serious concerns about the exertion of undue influence over the certification process. In October 2019, the Joint Authorities Technical Review ("JATR") of the 737 MAX¹⁷ noted:

[I]n the B737 MAX program, the FAA had inadequate awareness of the MCAS function which, coupled with limited involvement, resulted in an inability of the FAA to provide an independent assessment of the adequacy of the Boeing proposed certification activities associated with MCAS. In addition, signs were reported of undue pressures on Boeing ODA engineering unit members (E-UMs) performing certification activities on the B737 MAX program, which further erodes the level of assurance in this system of delegation.

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¹⁷ The JATR was a study commissioned by the FAA "to review the type certification of the flight control system on the B737 MAX." The JATR was conducted by members of the NTSB, FAA, and several international civil aviation authorities.

- MCAS that were never documented to the FAA. For example, the horizontal stabilizer had a maximum possible deflection of just under 5 degrees when causing the plane to pitch downward and in Boeing's System Safety Analysis of the MCAS, the horizontal stabilizer was described as being able to move 0.6 degrees under MCAS control. However, when the aircraft actually entered operation, the MCAS had been modified such that it could move the horizontal stabilizer more than four times that amount, up to 2.5 degrees (more than half of the total possible deflection). Because the horizontal stabilizer is a larger control surface, it exerts more control over the pitch of the aircraft relative to the pilot's control inputs to the elevator. The ability of the MCAS to cause the horizontal stabilizer to move more than half of the total possible deflection meant that even a single instance of MCAS activation could dramatically, rapidly, and (for the pilots) unexpectedly alter the pitch of the aircraft downward. Boeing did not update its System Safety Analysis to reflect this design change and the safety impact of the change was thus never tested or assessed directly by the FAA.
- 136. In addition: "During the certification process, a decision was made to remove information relating to MCAS functionality from the draft Flight Crew Operating Manual (FCOM). This decision meant that the FAA Flight Standardization Board ("FSB") was not fully aware of the MCAS function and was not in a position to adequately assess training needs." Southwest was directly involved with the efforts underlying this decision to prevent the flight manuals from mentioning MCAS, based on their intent to avoid having to add costly simulation and training requirements.
- 137. In addition, the JATR report highlighted the lack of information provided to the FAA regarding the MCAS aboard the 737 MAX:

Although some FAA personnel may have been briefed on the MCAS function, the JATR team did not have access to the contents of such briefings to evaluate the level of information provided to the FAA. In addition, based on its review, the JATR team concluded that the content of certification deliverables would not have provided FAA technical staff with awareness of key details of the MCAS function on the B737 MAX, including architecture, signal inputs, and limits of authority.

138. Although Boeing asserted in its applications for amended type certification for the 737 MAX that the MCAS was not a new or novel feature that required particular FAA scrutiny, where among other things it had already been in use aboard the military 767 tanker aircraft, that military aircraft's MCAS system relied on the input from **two** AoA sensors, in contrast to the MCAS aboard the 737 MAX, which relied on input from only a single AoA sensor. And the JATR concluded that the MCAS used in the 737 MAX in fact represented "a significant functional change" to control the aircraft's movements in a novel manner (in contrast to Boeing's characterization in the amended type certificate application):

If the FAA technical staff had been fully aware of the details of the MCAS function, the JATR team believes the agency likely would have required an issue paper for using the stabilizer in a way that it had not previously been used. MCAS used the stabilizer to change the column force feel, not trim the aircraft. This is a case of using the control surface in a new way that the regulations never accounted for and should have required an issue paper for further analysis by the FAA. If an issue paper had been required, the JATR team believes it likely would have identified the potential for the stabilizer to overpower the elevator.

* * *

In the context of the B737 MAX, the JATR team's assessment is that MCAS should have been considered a novelty (and therefore clearly highlighted to the FAA technical staff) owing to the important differences in function and implementation it has on the B737 MAX compared with the previous MCAS installed on the B767-C2 (tanker).

139. Further, Boeing apparently never indicated to the FAA during certification of the 737 MAX that the MCAS needed to comply with FAA regulations governing the operations of "installed systems and equipment for use by the flight crew," a section which, in its introduction, explains that:

This section applies to installed systems and equipment intended for flightcrew members' use in operating the airplane from their normally seated positions on the flight deck. The applicant must show that these systems and installed equipment, individually and in combination with other such systems and equipment, are designed so that qualified flightcrew members trained in their use can safely perform all of the tasks associated with the systems' and equipment's intended functions.

- 140. And because Boeing never stated that the MCAS needed to comply with this regulation, neither Boeing nor the FAA ever determined that the MCAS complied.
- 141. In fact, it appears that the FAA delegated significant responsibility to Boeing, under the ODA program, and that it was ultimately Boeing, not the FAA, that conducted the system safety assessments of the MCAS. The JATR report concludes that had the FAA been involved in the certification process for the MCAS, safety would have been improved.
 - 2. Southwest Participated in and Sought to Benefit from Misleading the FAA and the Public Both Before and After the Crash of Flight 610
- 142. Because Southwest, as a long-standing close commercial partner with Boeing, was involved in the development of the 737 MAX, it was aware of the lack of simulation and testing in the face of the commercial pressure to rush the aircraft to market. In fact, during the development and approval process of the 737 MAX, Southwest actively worked to prevent the inclusion of the MCAS in 737 MAX documentation, including the flight manual, in order to withhold from the FAA various differences between the 737 NG and the 737 MAX, as part of its ongoing strategy to avoid any additional requirements for pilot training and simulation on the 737 MAX. Southwest and Boeing did not, however, notify the FAA of the decision to forgo simulation

and testing of the MCAS used in the 737 MAX, out of an apparent concern that FAA regulators would require such measures under applicable laws and regulations.

- 143. After the crash of Flight 610, the FAA issued an Airworthiness Directive dated November 7, 2018, which attributed the crash to an error in AoA sensor input. Nowhere in this Directive did it appear that the FAA was aware that it was the MCAS that was actually involved in the pitch commands that caused the crash. Instead, the FAA seems to have concluded that the problem could be addressed by revising the 737 MAX's certificate limitations and its operating procedures, so that pilots could trim the aircraft as needed, to correct what the FAA concluded was a "runaway horizontal stabilizer." A "runaway stabilizer" was not a novel failure mode for aircraft, and Boeing and Southwest pilots had existing training procedures regarding how to address this issue in earlier generations of 737 aircraft that did not have the MCAS. The failure to explain the MCAS involvement thus created a false impression that the issue was substantially similar to runaway stabilizer issues with which FAA regulators and Southwest flightcrews were already familiar. Apparently content to leave the FAA in the dark, neither Boeing nor Southwest offered any follow-on clarifications that the MCAS existed and was involved in the pitch control functions at issue. Thus, it appears that FAA regulators remained unaware of the MCAS design flaws when issuing this Directive.
- 144. Even after the crash of Flight 610, Southwest continued to operate the 737 MAX with the same defective MCAS and related systems onboard, despite making public statements that falsely asserted that "[c]urrently, the MAX and NG have an AoA disagree light that provides an alert of erroneous AoA data" (the AoA Disagree Indicator was not, in fact, operational in these Southwest aircraft), and that the activation of the optional AoA Gauge would render Southwest's 737 MAX aircraft safe (it would not).

- 145. To actually render the 737 MAX safe would have required grounding the aircraft until an extensive redesign and safety testing of the MCAS and associated systems could be completed, along with pilot training and simulation, to ensure compliance with FAA regulations. This did not occur at the time, and the 737 MAX continued flying.
- 146. As alleged above, on March 10, 2019, Flight 302 crashed, killing all aboard. On March 11, 2019, Southwest made public statements that it remained confident in the safety of its 737 MAX aircraft, despite knowing that the two crashes of the 737 MAX were caused by the defectively designed MCAS and related systems aboard its own aircraft, and that its pilots had not been told about or trained in the operation of the MCAS before the Lion Air crash earlier.
- 147. On March 13, 2019, the FAA ordered that all 737 MAX aircraft in the United States be grounded until the issue could be fully investigated.
- 148. Subsequent investigations have revealed additional flaws in the 737 MAX, including those operated by Southwest, that were never apparently disclosed to regulators, including what the FAA categorized in a June 26, 2019 report as catastrophic software flaws that would cause systems failures in emergencies involving the MCAS system. In addition, the JATR report revealed that an early system safety analysis of MCAS was not updated despite changes to the MCAS system that were ultimately part of the certification, noting that there was no evidence of "documented risk, failure, or safety analyses conducted on the MCAS software" after these changes were made.
- 149. In its October 11, 2019 report, the JATR also noted the failures of oversight and evaluation that plagued the aircraft's certification:

The JATR team reviewed the design process of the flight control system and the related SSAs for the B737 MAX to assess whether the flight control system complies with applicable system design and safety requirements and standards. **The JATR team found**

that the MCAS was not evaluated as a complete and integrated function in the certification documents that were submitted to the FAA. The lack of a unified top-down development and evaluation of the system function and its safety analyses, combined with the extensive and fragmented documentation, made it difficult to assess whether compliance was fully demonstrated. The MCAS design was based on data, architecture, and assumptions that were reused from a previous aircraft configuration without sufficient detailed aircraft-level evaluation of the appropriateness of such reuse, and without additional safety margins and features to address conditions, omissions, or errors not foreseen in the analyses.

150. In the wake of the Flight 302 crash, and after other countries' aviation authorities grounded the 737 MAX, public sentiments were clear: Southwest's customers wanted to know how to avoid flying on the 737 MAX, as the airplane was finally being publicly perceived accurately – as an unsafe and non-airworthy aircraft.

V. SOUTHWEST SOLD TICKETS FOR TRAVEL ON UNSAFE AND NON-AIRWORTHY AIRCRAFT, IN BREACH OF THE CONTRACT OF CARRIAGE

- 151. As alleged above, the CoC set forth a number of contractual promises to its customers, including: (i) Southwest's promises that its pilots are trained on and familiar with every plane in Southwest's fleet; (ii) Southwest's promises to ensure the safety of its passengers; and (iii) Southwest's promises to comply with government regulations and guidelines, including FAA regulations.¹⁸
- 152. Between August 29, 2017 and March 13, 2019, Southwest sold tickets for and operated flights carrying roughly 40 million passengers, including flights aboard the defective and unsafe 737 MAX.
- 153. In addition, Southwest sold tickets for and operated the 737 MAX on routes also serviced by the Legacy 737 Aircraft in its fleet during the Class Period. But because the CoC at

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¹⁸ These promises apply to "all published routes and services." See \P 30 supra.

Section 9(a)(3) explicitly states that Southwest can substitute the aircraft used for a given flight without notice to passengers, customers did not and could not know at the time they purchased their tickets whether their flight would be on a 737 MAX or instead on one of the Legacy 737 Aircraft.

- A. Southwest Breached Its Promise that Its Pilots Have Been Trained on and Are Familiar with All Aircraft in Southwest's Fleet
- and familiar with every airplane in our fleet." As alleged above, before the Lion Air crash, Southwest never, *inter alia*: (i) disclosed to its pilots that the MCAS existed, let alone imparted to the pilots an understanding of how the MCAS operated and how to respond to its operation (*see*, *e.g.*, ¶¶ 106-109 *supra*); (ii) disclosed to its pilots that the AoA Disagree Indicator was either not installed or not operational in its 737 MAX aircraft (*see*, *e.g.*, ¶¶ 83-91 *supra*); (iii) disclosed to its pilots that the cut-out switches in the 737 MAX operated materially differently than the 737 NG and that in the 737 MAX flipping either switch deactivated all electric controls for the stabilizer; (iv) trained its pilots in how to determine whether the MCAS was activating and, if so, how to respond to its activation and operation, including how to manually override and/or disengage the system in the event of an emergency (*see*, *e.g.*, ¶¶ 111-114, 116-122 *supra*).
- 155. Accordingly, Southwest's pilots were neither "trained" on nor "familiar with" Southwest's 737 MAX, in violation of Southwest's promises to Plaintiffs and the Class members. Indeed, Southwest's pilots remained untrained in connection with the operation of the MCAS and related systems even after Southwest's reluctant revelation in the wake of the Lion Air crash that the MCAS existed.

- 156. This breach was compounded by Southwest's apparent failure to conduct an inspection of the aircraft sufficient to determine the absence of a functioning AoA Disagree Indicator (for which it had contracted to be installed). See ¶¶ 82-91, supra.
- 157. As alleged above at ¶¶ 100-104, the previous generation 737 NG aircraft also implemented a dual AoA sensor system and, unlike Southwest's 737 MAX aircraft, had a functional AoA Disagree Indicator. Because Southwest intended that its pilots would be able to operate the 737 MAX without additional training based on their existing familiarity with the avionics and controls of the 737 NG, Southwest pilots would reasonably assume that there was a functional AoA Disagree Indicator in the 737 MAX, as there was in the 737 NG with which they were already familiar, given the absence of any training to the contrary.
- 158. But Southwest's failure to determine that the AoA Disagree Indicator was not operational in its 737 MAX aircraft meant that (by definition) pilots operating the 737 MAX were not (and could not have been) "trained" or "familiar with" the AoA Disagree Indicator in the 737 MAX.
- 159. Further, as alleged above at ¶¶ 105-114, Southwest's failure to inform its pilots about the existence of the MCAS and related systems meant that these flightcrews would have expected that the procedures historically used to control a runaway stabilizer would operate in the 737 MAX as they had in the previous 737 models with which they were familiar. For example, as alleged above, in the 737 MAX, Boeing changed the function and labelling of the cut-out switches, such that flipping either switch deactivated all electric controls for the stabilizer. Southwest did not inform or train its pilots about these changes to the system.
- 160. Southwest's pilots were thus not "trained" or "familiar with" this cut-out switch system on the 737 MAX or the manual override procedures applicable to the MCAS in the 737

MAX (not to mention the existence and/or operation of the MCAS entirely), in violation of Southwest's contractual promise that its pilots "are trained and familiar with every airplane in our fleet."

B. Southwest Breached Its Specific and General Promises of Safety

1. Southwest Breached Its Specific Promises of Safety

161. As noted above, the CoC made specific promises of safety to its customers. Examples include:

Promise	Breach
Southwest promised that its "first priority	As shown herein, by participating in the flawed
and [] first responsibility to you, our valued	design and insufficient testing of the defective 737
Customer, is and has always been safety."	MAX, violating FAA regulations, failing to properly
Ex. B at 5.	inspect the 737 MAX, failing to properly train its
	pilots on the 737 MAX, choosing to fly the unsafe and
	non-airworthy 737 MAX, and misleading the FAA,
	pilots, and the public regarding the unsafe condition
	of its 737 MAX aircraft, Southwest demonstrated that
	it did not treat the safety of passengers as its first
	priority or first responsibility.

Promise	Breach
Southwest promised that it "predicated [its]	As shown herein, by participating in the flawed
daily operational and scheduling decisions	design and insufficient testing of the defective 737
on the safety, security, and wellbeing of our	MAX, violating FAA regulations, failing to properly
Customers." Ex. B at 5.	inspect the 737 MAX, failing to properly train its
	pilots on the 737 MAX, choosing to fly the unsafe and
	non-airworthy 737 MAX, and misleading the FAA,
	pilots, and the public regarding the unsafe condition
	of its 737 MAX aircraft, Southwest demonstrated that
	its operational decisions were not predicated on the
	safety of its customers.
The CoC provides that the "CSC further	As shown herein, by participating in the flawed
explains, augments, and expands upon	design and insufficient testing of the defective 737
Carrier's dedication to Customer safety .	MAX, violating FAA regulations, failing to properly
" Ex. A § 10(b)(1).	inspect the 737 MAX, failing to properly train its
	pilots on the 737 MAX, choosing to fly the unsafe and
	non-airworthy 737 MAX, and misleading the FAA,
	pilots, and the public regarding the unsafe condition
	of its 737 MAX aircraft, Southwest demonstrated that
	it was not dedicated to the safety of its customers.

Promise	Breach
Southwest promised that it "is committed to	As shown herein, by participating in the flawed
ensuring the Safety and Security of our	design and insufficient testing of the defective 737
Customers and Employees—it's our number	MAX, violating FAA regulations, failing to properly
one priority." Ex. C.	inspect the 737 MAX, failing to properly train its
	pilots on the 737 MAX, choosing to fly the unsafe and
	non-airworthy 737 MAX, and misleading the FAA,
	pilots, and the public regarding the unsafe condition
	of its 737 MAX aircraft, Southwest demonstrated that
	it was not committed to ensuring the safety of its
	customers, did not act to ensure the safety of its
	customers, and did not make the safety of its
	customers its number one priority.

Promise	Breach
Southwest promised that it "continually	As shown herein, by participating in the flawed
work[s] to create and foster a Culture of	design and insufficient testing of the defective 737
Safety and Security that proactively	MAX, violating FAA regulations, failing to properly
identifies and manages risks to the operation	inspect the 737 MAX, failing to properly train its
and workplace before they can become	pilots on the 737 MAX, choosing to fly the unsafe and
injuries, accidents, or incidents." Ex. C.	non-airworthy 737 MAX, and misleading the FAA,
	pilots, and the public regarding the unsafe condition
	of its 737 MAX aircraft, Southwest demonstrated that
	it did not create and foster a culture of safety that
	proactively identified and managed the risk
	represented by the 737 MAX.
Southwest promised that "[a]ll Southwest	As shown herein, by participating in the flawed
Airlines Employees, from Leadership to	design and insufficient testing of the defective 737
Frontline Employees, are responsible for	MAX, violating FAA regulations, failing to properly
Establishing and upholding the highest levels	inspect the 737 MAX, failing to properly train its
of Safety and Security in our operation and	pilots on the 737 MAX, choosing to fly the unsafe and
our workplaces." Ex. C.	non-airworthy 737 MAX, and misleading the FAA,
	pilots, and the public regarding the unsafe condition
	of its 737 MAX aircraft, Southwest did not establish
	and uphold the highest levels of safety in its
	operation.

Promise	Breach
Southwest promised that "[a]ll Southwest	As shown herein, by participating in the flawed
Airlines Employees, from Leadership to	design and insufficient testing of the defective 737
Frontline Employees, are responsible for	MAX, violating FAA regulations, failing to properly
Complying with all government	inspect the 737 MAX, failing to properly train its
regulations and guidelines." Ex. C.	pilots on the 737 MAX, choosing to fly the unsafe and
	non-airworthy 737 MAX, and misleading the FAA,
	pilots, and the public regarding the unsafe condition
	of its 737 MAX aircraft, Southwest did not comply
	with all government regulations and guidelines.
Southwest promised that "[a]ll Southwest	As shown herein, by participating in the flawed design and
Airlines Employees, from Leadership to	insufficient testing of the defective 737 MAX, violating
Frontline Employees, are responsible for	FAA regulations, failing to properly inspect the 737 MAX,
Proactively identifying and reporting hazards in	failing to properly train its pilots on the 737 MAX,
the operation " Ex. C.	choosing to fly the unsafe and non-airworthy 737 MAX,
	and misleading the FAA, pilots, and the public regarding
	the unsafe condition of its 737 MAX aircraft, Southwest
	failed to identify and report the hazard represented by the
	737 MAX.

162. Southwest's conduct during the design and development of the 737 MAX is particularly troubling, given its direct involvement with Boeing in that process. As alleged above, Boeing's Systems Safety Analysis of the 737 MAX MCAS, conducted pursuant to the ODA program, mischaracterized the MCAS as not a new or novel technology or feature, despite the fact that the MCAS, as observed by the JATR report and FAA assessment, was a novel feature that

performed its function in a novel way. Southwest, as a long-time commercial partner with Boeing, was directly involved with the design and development of the 737 MAX, and not only knew that testing and simulation of the MCAS had been avoided during development of the 737 MAX, but in fact Southwest's own purchase agreements incentivized these shortcuts in design, such that Boeing would have been obligated to reimburse Southwest substantial amounts of money if the FAA were to require that pilots undergo simulator training before operating the 737 MAX. Southwest, like Boeing, then chose not to notify the FAA of its decision to forgo simulation and testing of the MCAS used in the 737 MAX, out of an apparent concern that FAA regulators would require such measures under applicable laws and regulations. *See* ¶¶ 133-149, *supra*.

- 163. This meant that the safety impact of issues like the MCAS's use of only one of two available AoA sensors avoided FAA scrutiny during the certification process. The operational characteristics of the MCAS described in Boeing's Systems Safety Analysis, such as the substantial increase in allowable horizontal stabilizer deflection from 0.6 to 2.5 degrees (out of a total possible deflection of 5 degrees), were never updated to reflect assessments of safety impacts of such changes, and FAA regulators were thus not aware of them during the certification process. See ¶¶ 134-137, supra.
- and operational flaws described above at ¶¶ 69-149 (which were present in and affected the Southwest 737 MAX aircraft during the Class Period), which would have to be rectified, in one way or another, before the FAA would allow the aircraft to return to service. Southwest, therefore, took possession of and operated an aircraft that had not been properly certified under FAA regulations, and was, in fact, not airworthy. And despite its notice of the fatal flaws in its 737 MAX, Southwest failed to disclose these issues to regulators and the public until the grounding of

the 737 MAX. Moreover, Southwest compounded these safety problems by falsely implying to the public that the safety defects in the 737 MAX had been resolved in the wake of the Lion Air crash.

- Aircraft, and because customers did not and could not know at the time they purchased their tickets whether they would be placed aboard a 737 MAX, merely purchasing a ticket with Southwest (regardless of whether one ultimately flew on a 737 MAX or one of Southwest's Legacy 737 Aircraft) meant that customers were unwittingly taking a chance of flying aboard the fatally flawed 737 MAX.
- 166. Thus, by selling tickets to all Class member customers during the Class Period, and thereby subjecting them to the risk of flying on (and/or by actually flying them on) the fatally flawed 737 MAX, Southwest breached its foregoing promises to the Class member customers regarding safety. Southwest took shortcuts that prioritized its profits and its bottom line over the safety of its customers. These breaches of Southwest's contractual promises regarding safety persisted until at least March 13, 2019, when the FAA grounded the 737 MAX.

2. Southwest Breached Its General Promises of Safety

- 167. In addition to the above promises of safety, Southwest's contract with its passengers generally promised its passengers safe flights on safe aircraft. This should be fully expected: safety is, ultimately, the most important consideration for passengers. To compete, an airline must convince passengers including through its contract of carriage that the airline and its airplanes are safe.
- 168. That is one reason why promises of and references to safety may be found throughout the CoC:

- The CoC provides that the "CSC further explains, augments, and expands upon Carrier's . . . dedication to Customer **safety**"19
- The CSC provides: "[T]he first priority of this airline and its Employees, and our first responsibility to you, our valued Customer, is and has always been **safety**. Since our inception in 1971, we have predicated our daily operational and scheduling decisions on the **safety**, security, and wellbeing of our Customers, Employees, and equipment. We do not believe that this is an area where you would want or expect us to compromise for any reason."²⁰
- The CoC incorporates a "Safety and Security Commitment" *i.e.*, the SSC, signed by the company's CEO and Chairman of the Board.
- The SSC provides that Southwest "is committed to ensuring the **Safety** and Security of our Customers and Employees it's our number one priority."
- The SSC provides that Southwest "continually work[s] to create and foster a
 Culture of Safety and Security that proactively identifies and manages risks to the
 operation and workplace before they can become injuries, accidents, or incidents."
- The SSC provides that Southwest has "established Company policies and governance to drive our focus on **Safety** and Security."
- The SSC provides that "[a]ll Southwest Airlines Employees, from Leadership to Frontline Employees, are responsible for:
 - Establishing and upholding the highest levels of Safety and Security in our operation and our workplaces

¹⁹ Ex. A § 10(b)(1).

²⁰ Ex. B at 5.

- Complying with all Company Safety and Security policies and procedures, along with all government regulations and guidelines
- Proactively identifying and reporting hazards in the operation and contributing to our positive Safety and Security Culture and performance
- The SSC provides that Southwest Airlines is committed to:
 - Establishing and annually reviewing specific Safety-related objectives by Executive Leadership . . .
 - o Monitoring, measuring, and tracking **Safety** objectives to ensure they are met.
 - Establishing and promoting **Safety** and Security reporting processes . . .
 - o and upholding the highest levels of **Safety** and Security in our operation and our workplaces
- The SSC provides: "The Chief Operating Officer is committed to and responsible for the
 development, operation, and quality control of Southwest Airlines' Safety and Security
 Management System (SMS) . . . and is the Accountable Executive in all matters of Safety
 and Security."
- obligation to take safety-related actions to provide safe flights to its passengers. These provisions are ultimately intended to protect the safety of Southwest's rule-abiding customers. *See, e.g.*, Ex. A § 6(a)(1) (regarding removal of passengers "[w]henever such action is necessary . . . for reasons of aviation **safety**"); Ex. A § 6(b)(1)(ix) (regarding removal of passengers "[m]aking threats against the **safety** of the Crew, passengers and aircraft"); Ex. A § 9(a)(4) (regarding limitation on carrier liability for "failure or delay in operating any flight . . . for reasons of aviation **safety**").
- 170. In addition, the CoC's references to compliance with governmental laws, regulations and guidelines are also meant to convey a promise of safety to customers because a

culture of compliance with safety-related aviation rules and guidelines is readily associated with safe aviation. This can be seen explicitly, such as where the SSC provides that Southwest is "responsible for . . . [c]omplying with all Company **Safety** and Security policies and procedures, along with all government regulations and guidelines"²¹

- applicable laws, regulations, and rules imposed by U.S. . . . governmental agencies," and that "[i]n the event of a conflict between the terms of this Contract and such applicable laws, regulations or rules, the latter shall apply."²² These provisions requiring that the CoC is subject to, and will not conflict with, FAA regulations requiring Southwest to fly airworthy vessels embody the promise that Southwest will not violate FAA regulations requiring it to fly safe and airworthy vessels.
- 172. Just as importantly, nothing in the CoC either expressly or implicitly even alludes to (let alone endorses) the idea that Southwest may operate unsafe or non-airworthy airplanes. Quite the opposite, the primary focus of the CoC is as it should be on promising safety to Southwest passengers.
- 173. Indeed, were it otherwise, Southwest customers would certainly be shocked to learn that the CoC permitted Southwest to operate unsafe and non-airworthy aircraft.
- 174. Accordingly, the CoC, when read as a whole, promises its customers that they are purchasing safe flights on safe aircraft. As alleged above, by selling flights to the Class member customers on the 737 MAX, Southwest breached its general express and implied promises of safety.

²¹ Ex. C.

²² Ex. A § 1(a)(1).

C. Southwest Breached Its Contractual Promises that Southwest Will Comply with FAA Regulations

1. The SSC

- 175. As alleged above, the SSC expressly promises that its "number one priority" is its commitment to "ensuring the Safety and Security of our Customers" and, as part of that commitment, promises that "[a]ll Southwest Airlines Employees, from Leadership to Frontline Employees, are responsible for . . . [c]omplying with all Company Safety and Security policies and procedures, all government regulations and guidelines"
- 176. Southwest violated its promise to comply with "all government regulations and guidelines" in numerous ways, including by:
 - taking possession of and operating the 737 MAX in a condition that rendered the aircraft non-airworthy under applicable FAA regulations such as 14 CFR § 25.143 (requiring that aircraft be safely controllable and maneuverable and that it be "possible to make a smooth transition from one flight condition to any other flight condition without exceptional piloting skill, alertness, or strength"); § 25.171 (governing aircraft control and stability); § 43.15 (requiring that inspection must determine whether aircraft is in airworthy condition); § 91.403 (making aircraft operators responsible for maintaining aircraft in airworthy condition); § 91.409 (prohibiting operation of aircraft that have not been properly inspected for airworthiness); § 25.1302 (requiring that operation of flightcrew systems and equipment must be "[p]redictable and unambiguous" and "[d]esigned to enable the flightcrew to intervene in a manner appropriate to the task"); § 25.1322 (requiring that flightcrew alerting equipment provide flightcrew with information needed to identify non-normal operation or conditions, and to determine appropriate actions); and § 121.153 (prohibiting operation of an aircraft that is not in airworthy condition);

- never informing the FAA that the MCAS had not undergone simulation and testing, in violation of FAA regulations such as 14 CFR § 25.1302 (requiring that operation of flightcrew systems and equipment must be "[p]redictable and unambiguous" and "[d]esigned to enable the flightcrew to intervene in a manner appropriate to the task");
- failing to conduct an adequate inspection of the 737 MAX, which would have revealed that the AoA Disagree Indicator was not in fact operational in 737 MAX aircraft Southwest bought from Boeing, even though Southwest had opted to include that feature when buying the aircraft from Boeing, violating regulations such as 14 CFR § 43.15 (requiring that inspection must determine whether aircraft is in airworthy condition); § 91.403 (making aircraft operators responsible for maintaining aircraft in airworthy condition); § 91.409 (prohibiting operation of aircraft that have not been properly inspected for airworthiness); § 25.1302 (requiring that operation of flightcrew systems and equipment must be "[p]redictable and unambiguous" and "[d]esigned to enable the flightcrew to intervene in a manner appropriate to the task"); and § 25.1322 (requiring that flightcrew alerting equipment provide flightcrew with information needed to identify non-normal operation or conditions, and to determine appropriate actions); and
- failing to inform pilots about the existence and operation of the MCAS, including withholding information from pilots about the critical differences in emergency manual override procedures between the 737 MAX and Southwest's Legacy 737 Aircraft, in violation of FAA regulations such as 14 CFR § 91.403 (making aircraft operators responsible for maintaining aircraft in airworthy condition); § 91.505 (requiring that pilots be familiar with aircraft's operating limitations and emergency equipment); § 121.135 (governing required contents of aircraft flight manuals); and § 25.1302 (requiring that

operation of flightcrew systems and equipment must be "[p]redictable and unambiguous" and "[d]esigned to enable the flightcrew to intervene in a manner appropriate to the task").

177. Southwest breached its contract with Plaintiffs and the Class member customers who purchased flights by failing to comply with these and other "government regulations and guidelines."

2. The CoC

178. As alleged above, another provision of the CoC provides that the CoC "is subject to applicable laws, regulations, and rules imposed by U.S. . . . governmental agencies," which would include, *inter alia*, FAA rules and regulations and related U.S. laws governing aircraft safety, aircraft operation, and air travel. Because the CoC governs the relationship between Southwest and its passengers and because FAA regulations impose affirmative obligations on Southwest, the CoC's express subjection of the airline-passenger contractual relationship to FAA regulations necessarily makes Southwest's compliance with FAA regulations part of Southwest's contractual relationship with its customers. Such an interpretation would certainly comport with a common-sense understanding (of airline passengers and others) that by contractually referencing FAA regulations and making its contractual conduct "subject to" FAA regulation, an airline is merely contractually agreeing to do what it already should be doing and is already legally required to do – *i.e.*, follow FAA safety regulations.

179. Moreover, the CoC additionally provides that "[i]n the event of a conflict between the terms of this Contract and such applicable laws, regulations or rules, the latter shall apply." Accordingly, Southwest agreed that FAA regulations control the terms of the CoC and that the CoC may not conflict in any way with FAA regulations. To the extent that Southwest attempts to argue that other provisions of the CoC permitted Southwest to violate FAA regulations or to fly unsafe planes, such an interpretation must yield to the principle that FAA regulations control the

terms of the CoC and, therefore, Southwest is required by the CoC to abide by them and their provisions relating to aviation safety.

3. The Contract Read as a Whole

- 180. FAA regulations impose stringent requirements on airplane manufacturers and airline operators that are directed toward ensuring passenger safety. As mentioned above, the aviation industry has historically achieved tremendous success at providing safe and reliable transportation. That stems in part from the regulatory oversight by the FAA and compliance with its regulations. Airline operators such as Southwest cannot operate without FAA approval and at all times must comply with FAA regulations regarding their operations and their aircraft.
- 181. In this context, Southwest's passengers, including Plaintiffs and the Class, had a reasonable expectation that Southwest was in fact complying with FAA regulations.
- 182. Given that Southwest was already legally required to comply with FAA regulations, and given passenger expectations that Southwest was in fact complying with FAA regulations, it should be fully expected that Southwest would agree to and did promise its passengers that it would comply with FAA regulations, especially FAA regulations bearing upon passenger safety.
- 183. Against this backdrop, the CoC should be read as a whole with regard to Southwest's promise to comply with FAA regulations. First, Southwest agreed that the CoC is "subject to" FAA regulations. Then, Southwest further agreed that FAA regulations trump all divergent CoC provisions. Southwest also yet further agreed that it is responsible for "[c]omplying with all government regulations and guidelines"
- 184. Taken together and in context, these provisions clearly set forth Southwest's promise to its customers to comply with all applicable FAA regulations, particularly those relating to passenger safety.

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with several defects that led to the FAA's grounding the aircraft on March 13, 2019. The FAA required that these issues be remedied before the aircraft would be allowed to return to service. This grounding order indicates that the FAA did not consider the 737 MAX aircraft to be safe or airworthy pursuant to applicable FAA regulations during the Class Period. As also mentioned above, Southwest engaged in efforts to mislead FAA regulators into approving the 737 MAX without a need for pilot training and simulation on the operation of the MCAS, including Southwest's successful efforts to prevent the 737 MAX flight manual from mentioning the MCAS. Southwest then sold flights to the Class member customers who were at risk of travelling aboard aircraft that, contrary to Southwest's promise to provide transportation in compliance with FAA regulations, were not safe or airworthy according to those regulations. Further, Southwest failed to comply with its obligations to operate, inspect, and maintain its aircraft and to train and inform its pilots under FAA regulations, such as those discussed above at ¶ 175.

D. Southwest's Breaches of Its Contractual Promises Have Proximately Caused Injury to Plaintiffs and the Class Members

186. At the time of sale, Plaintiffs and Class member customers agreed to purchase flight tickets under the terms set forth in the CoC. Southwest breached those terms as set forth above and, as a proximate and foreseeable result of those breaches, Plaintiffs and the Class members did not receive the benefit of the bargain and were overcharged for the purchased tickets.

CLASS ACTION ALLEGATIONS

I. THE CLASS DEFINITION

187. Plaintiffs reallege and incorporate by reference all preceding paragraphs as though fully set forth herein.

188. Plaintiffs bring this action on behalf of themselves and, pursuant to Rule 23 of the Federal Rules of Civil Procedure, seek to represent a class (the "Class") defined as:

All persons who provided valuable consideration, whether in money or other form (*e.g.*, voucher, miles/points, etc.), in exchange for a ticket for air transportation on Southwest Airlines which transportation took place between August 29, 2017, and March 13, 2019.

- 189. Excluded from the Class are Defendant, Defendant's officers, directors, agents, trustees, parents, children, corporations, trusts, representatives, employees, principals, servants, partners, joint ventures, or entities controlled by Defendant, and their heirs, successors, assigns, or other persons or entities related to or affiliated with Defendant and/or Defendant's officers and/or directors, the judge assigned to this action, any member of the judge's immediate family, and all counsel of record.
- 190. Plaintiffs reserve the right to expand, limit, modify, or amend the definition of the Class as may be desirable or appropriate during this litigation.
- 191. This action is brought and may be properly maintained on behalf of the proposed Class under Federal Rule of Civil Procedure 23. This action satisfies the numerosity, adequacy, typicality, and commonality requirements of Rule 23(a), and the predominance and superiority requirements of Rule 23(b)(3).

II. NUMEROSITY AND ASCERTAINABILITY: FED. R. CIV. P. 23(a)(1)

192. The Class is so numerous and geographically dispersed that joinder of all Class members is impracticable. Plaintiffs reasonably estimate that there are tens of thousands, if not hundreds of thousands, of members in the Class. Class members may be identified through objective means, such as sales records, flight manifests, and other records kept in the ordinary course of business by Southwest.

193. Class members can be notified of this action by recognized methods of notice, such as by mail or email, or publication in print or on the internet.

III. COMMONALITY AND PREDOMINANCE: FED. R. CIV. P. 23(a)(2) AND 23(b)(3)

- 194. Questions of law and fact that have common answers for the Class predominate over questions affecting only individual Class members. These questions include, without limitation:
 - (a) Whether Plaintiffs and the Class purchased Southwest tickets for air travel which occurred between August 29, 2017 and March 13, 2019;
 - (b) Whether the same express and/or implied contracts existed between Plaintiffs and the Class, on the one hand, and Defendant, on the other hand;
 - (c) Whether Defendant engaged in the conduct alleged herein;
 - (d) Whether the Safety Problems and/or additional safety failures noted by the FAA Report were present on the Southwest 737 MAX aircraft at the time Plaintiffs and the Class flew during the Class Period;
 - (e) Whether at the time of ticket purchases, under Southwest's express policies, Plaintiffs and the Class could have been placed aboard a 737 MAX;
 - (f) Whether Defendant's conduct towards Plaintiffs and the Class breached identical or substantially the same contract as the CoC;
 - (g) Whether Defendant breached identical or substantially the same express or implied contracts with Plaintiffs and the Class at the time of purchase;
 - (h) Whether Southwest breached its promises to Plaintiffs under the CoC, including:
 - (i) Southwest's promises that its pilots have been trained on and are familiar with every plane in Southwest's fleet; (ii) Southwest's promises regarding

the safety of its passengers; and (iii) Southwest's promises to comply with FAA regulations;

- (i) Whether Southwest's breaches caused injury to Plaintiffs and the Class;
- (j) Whether as a result of Southwest's breach of its contract with Plaintiffs and the Class, Plaintiffs and the Class were overcharged for their plane tickets;
- (k) The amount that Plaintiffs and the Class were overcharged as a result of Defendant's breaches; and
- (l) The nature and extent of damages and other remedies to which the conduct of Defendant entitles Plaintiffs and the Class members.

IV. TYPICALITY: FED. R. CIV. P. 23(a)(3)

- 195. Plaintiffs' claims are typical of the claims of the Class members and arise from the same course of conduct toward Plaintiffs by Defendant Southwest Airlines.
- 196. The relief Plaintiffs seek is typical of the relief sought for all Class members. Further, there are no defenses available to Defendant that are unique to Plaintiffs.

V. ADEQUACY: FED. R. CIV. P. 23(a)(4)

- 197. Plaintiffs will fairly and adequately represent and protect the interests of the Class. Plaintiffs have retained counsel with substantial experience in prosecuting class actions.
- 198. Plaintiffs and their counsel are committed to vigorously prosecuting this action on behalf of the Class. Neither Plaintiffs nor counsel has interests adverse to those of the Class.

VI. SUPERIORITY: FED. R. CIV. P. 23(b)(3)

199. A class action is superior to other available methods for the fair and efficient adjudication of this controversy. The common questions of law and fact regarding Defendant's conduct and responsibility predominate over any questions affecting individual Class members.

- 200. Because the damages suffered by each individual Class member may be relatively small, the expense and burden of individual litigation would make it very difficult or impossible for individual Class members to redress the wrongs done to each of them individually, such that most or all Class members would have no rational economic interest in individually controlling the prosecution of specific actions, and the burden imposed on the judicial system by individual litigation by the Class would be significant, making class adjudication the superior option. Furthermore, individualized litigation would create the danger of inconsistent or contradictory judgments arising from the same set of facts.
- 201. Individualized litigation would also increase the delay and expense to all parties and the court system from the issues raised by this action. By contrast, the class action device provides the benefits of adjudication of these issues in a single proceeding, economies of scale, and comprehensive supervision by a single court, and presents no unusual management difficulties under the circumstances.
- 202. The conduct of this action as a class action presents far fewer management difficulties, far better conserves judicial resources and the parties' resources, and far more effectively protects the rights of each Class member than would piecemeal litigation. Compared to the expense, burdens, inconsistencies, economic infeasibility, and inefficiencies of individualized litigation, any challenge of managing this action as a class action is substantially outweighed by the benefits to the legitimate interests of the parties, the Court, and the public of class treatment, making class adjudication superior to other alternatives.

VII. CERTIFICATION OF SPECIFIC ISSUES: FED. R. CIV. P. 23(c)(4)

203. To the extent that the Class described herein does not meet the requirements of Rules 23(b)(2) or (b)(3), Plaintiffs seeks certification of issues that will drive the litigation toward resolution.

COUNT IBreach of Contract (as to the Class)

- 204. Plaintiffs reallege and incorporate by reference all preceding paragraphs as though fully set forth herein.
- 205. Prevailing on a breach of contract claim requires: (i) the existence of a valid contract; (ii) performance or tendered performance by the plaintiff; (iii) breach of the contract by the defendant; and (iv) damages sustained by the plaintiff as a result of the breach.
- 206. Plaintiffs and members of the Class each purchased tickets for valuable consideration for air travel on Southwest and such air travel took place during the Class Period.
- 207. Plaintiffs and members of the Class each purchased tickets that were subject to Southwest's CoC and the terms, materials, and agreements incorporated therein.
- 208. When it sold tickets for travel on airplanes that could have been the Boeing 737 MAX, Southwest breached its promises to Plaintiffs under the CoC, including: (i) Southwest's promises that its pilots have been trained on and are familiar with every plane in Southwest's fleet; (ii) Southwest's promises regarding the safety of its passengers; and (iii) Southwest's promises to comply with FAA regulations.
- 209. As a result of Southwest's breaches of the CoC, Plaintiffs and members of the Class have been damaged in the amount that they were overcharged for their tickets.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs, individually and on behalf of the Class, pray for judgment in their favor and against Defendant as follows:

(a) Certifying the Class as proposed herein, designating Plaintiffs as Class representatives, and appointing undersigned counsel as Class counsel;

- (b) Declaring that Defendant is financially responsible for notifying the Class members of the pendency of this action;
- (c) Declaring that Defendant has breached its contractual obligations to Plaintiffs and the Class;
 - (d) Awarding actual and/or compensatory damages;
 - (e) Scheduling a trial by jury in this action;
- (f) Awarding Plaintiffs reasonable attorneys' fees, costs and expenses, as permitted by law;
- (g) Awarding pre-judgment and post-judgment interest on any amounts awarded, as permitted by law; and
 - (h) Awarding such other and further relief as may be just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiffs demand trial by jury in this action of all issues so triable.

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^{*} Application for admission pro hac vice forthcoming