



IN THE COURT OF CHANCERY OF THE STATE OF DELAWARE

IN RE THE BOEING COMPANY :
DERIVATIVE LITIGATION : Consol. C.A. No. 2019-0907-MTZ

VERIFIED AMENDED CONSOLIDATED COMPLAINT

Co-Lead Plaintiffs Thomas P. DiNapoli, Comptroller of the State of New York, as Administrative Head of the New York State and Local Retirement System, and as Trustee of the New York State Common Retirement Fund, and Fire and Police Pension Association of Colorado, stockholders of The Boeing Company (“Boeing,” the “Company,” or “Nominal Defendant”), bring this action on Boeing’s behalf against the current and former officers and directors identified below (collectively, “Defendants”) arising from their failure to monitor the safety of Boeing’s 737 MAX airplanes. The allegations in this Verified Amended Consolidated Complaint (“Complaint”) are based on the knowledge of Co-Lead Plaintiffs as to themselves, and on information and belief, including the review of publicly available information and documents obtained under 8 *Del. C.* § 220,¹ as to all other matters.

¹ Plaintiffs received over 44,100 documents totaling over 630,000 pages. It is reasonable to infer that exculpatory information not reflected in the document production does not exist. *See Teamsters Local 443 Health Serv’s & Ins. Plan v. Chou*, C.A. No. 2019-0816-SG, 2020 WL 5028065, at *24 n.314 (Del. Ch. Aug. 24, 2020).

NATURE OF THE ACTION

1. In 1996, Chancellor Allen issued his famous opinion in *In re Caremark International Inc. Derivative Litigation*, in which he explained why a director's fiduciary duties "includes a duty to attempt in good faith to assure that a corporate information and reporting system, which the board concludes is adequate, exists[.]" One reason was because federal sentencing guidelines "offer powerful incentives for corporations today to have in place compliance programs to detect violations of law, promptly to report violations to appropriate public officials when discovered, and to take prompt, voluntary remedial efforts."

2. In 2011, Vice Chancellor Strine issued an opinion in *In re Massey Energy Company Derivative and Class Action Litigation* in which he explained how a non-exculpated *Caremark* claim had been adequately pled against outside directors of Massey Energy Company, for failures of safety monitoring "that can be proximately linked to the Upper Big Branch Disaster," a massive mine explosion that resulted in the death of 29 miners.

3. In 2019, Chief Justice Strine explained in *Marchand v. Barnhill* why outside directors of an ice cream manufacturer that sold *listeria*-infected ice cream were potentially liable for not assuring the existence of a "board-level system of monitoring or reporting on food safety," a subject that was "essential and mission critical" to the corporation.

4. The dates of these Delaware decisions correspond to three pivotal events at Boeing that combined to form an epochal corporate governance catastrophe.

5. In the mid-1990s, Boeing's leaders decided to dismantle their lauded safety-engineering corporate culture in favor of what became a financial-engineering corporate culture. One signal event was Boeing's 1997 acquisition of McDonnell Douglas, after which Boeing adopted McDonnell Douglas's cost-cutting approach to building airplanes. Within four years, Boeing had moved its corporate headquarters out of Seattle, to escape the influence of the resident flight engineers.

6. In 2011, Boeing's Board of Directors (the "Board") decided that its next generation of narrow-body commercial aircraft would be a reconfigured version of the Company's blockbuster 737 (the "737 MAX"), rather than an entirely new plane. This decision created new safety risks, but safety nowhere factored into the Board's decision. By the start of 2011, as a then-Boeing director later acknowledged, the Board had no tools to oversee safety. Safety was no longer a subject of Board discussion, and there was no mechanism within Boeing by which safety concerns respecting the 737 MAX were elevated to the Board or to any Board committee.

7. The Board did not develop any tools to evaluate and monitor airplane safety until 2019, *after* the October 2018 crash of a Lion Air 737 MAX (“Lion Air Crash”), *after* the March 2019 crash of an Ethiopian Airlines 737 MAX (“Ethiopian Airlines Crash”), and *after* the March 2019 grounding of the entire 737 MAX fleet. A board of directors is not immune from liability when it waits until after two mass fatality events and a worldwide halt on the public’s use of the corporation’s most important product before beginning to address a systemic risk to the company’s business. Commercial airline sales have long been Boeing’s largest source of revenue and profit, and the 737 MAX was Boeing’s best-selling airplane model of all time.

8. Defendants’ brief supporting dismissal of the original consolidated complaint opens with Boeing’s claim it was “deeply humbled” by the mass fatalities and has engaged in a “process of critical reflection and learning from tragic events.” Tragically, the allegations of this case extend to the Board’s *bad-faith response* to both mass fatality events. This case is not only about the Board’s intentional dismantling of a safety-engineering culture, the Board’s conscious failure to adopt board-level information-reporting systems respecting airplane safety, and the Board’s conscious decisions to ignore earlier red flags respecting airplane safety, such as the 2015 decision of the Federal Aviation Administration

(“FAA”) to levy against Boeing the second-largest fine for regulatory violations in FAA history (“FAA Settlement”).

9. Shortly after the Lion Air Crash in 2018, the Board learned that new software on the 737 MAX, the Maneuvering Characteristics Augmentation System (“MCAS”), was a potential cause of the crash, that the FAA had concluded that MCAS posed an unacceptably high risk of catastrophic failure, and that the FAA had issued an emergency directive notifying pilots about the potential danger. The Board did not order an immediate investigation into the safety of the 737 MAX, how Boeing obtained FAA certification of MCAS, or why MCAS was not mentioned in the flight manual for the 737 MAX. Instead, the Board supported the public relations campaign of then-Chief Executive Officer and Chairman Dennis A. Muilenburg to attack accurate media coverage respecting the 737 MAX.

10. During this same period, Boeing frustrated a federal criminal investigation by the United States Department of Justice (“DOJ”) into whether Boeing had defrauded the FAA when obtaining certification of the 737 MAX. One critical document was a series of text messages in which Boeing Chief Technical Pilot Mark Forkner wrote to another technical pilot in November 2016 that MCAS was “running rampant” while he tested it in a flight simulator, activating at a much lower speed than Boeing had acknowledged to the FAA, and thus he had “basically

lied to the regulators (unknowingly)” about MCAS. (*See* Exhibit A hereto.)

Boeing turned over the text messages to the DOJ in February 2019, but waited to produce them to the FAA until October 2019, in advance of congressional testimony by Muilenburg.

11. In January 2021, Boeing consented to the filing of a criminal information charging the Company with conspiracy to defraud the United States and agreed to pay a “Total U.S. Criminal Monetary Amount” of \$2.513 billion, which included a criminal monetary penalty of \$243.6 million. (*See* Exhibit B hereto.) Boeing admitted in a Deferred Prosecution Agreement (“DOJ Agreement”) that it had “intentionally withheld and concealed from the FAA [Aircraft Evaluation Group]” the fact that Boeing had expanded the scope of MCAS during the development of the 737 MAX so that MCAS could engage when the 737 MAX flew at low speeds (*e.g.*, during takeoff). In the words of the DOJ: “The misleading statements, half-truths, and omissions communicated by Boeing employees to the FAA impeded the government’s ability to ensure the safety of the flying public.” Boeing further admitted in the DOJ Agreement that “airplane manuals and pilot-training materials for U.S.-based airlines lacked information about MCAS, and relevant portions of these manuals and materials were similarly materially false, inaccurate, and incomplete as a result.”

12. By concealing information about MCAS, Boeing persuaded the FAA that the 737 MAX was not significantly different than the existing 737 Next Generation (“NG”) model, and so pilots trained on the NG could fly the 737 MAX without the need for airline customers to incur the costs of expensive flight simulator training. This, in turn, led to faster FAA approval, making the 737 MAX more attractive to Boeing customers, which increased sales of the 737 MAX.

13. The DOJ Agreement with Boeing states that Boeing “did not receive voluntary disclosure credit pursuant to the Corporate Enforcement Policy in the Department of Justice Manual 9-47.120, or pursuant to the Sentencing Guidelines, because it *did not timely and voluntarily disclose to the Fraud Section* the offense conduct described in the Statement of Facts[.]”² The DOJ Agreement further states that Boeing’s cooperation “was delayed and only began after the first six months of the Fraud Section’s investigation, during which time *the Company’s response frustrated the Fraud Section’s investigation*[.]”

14. Prior to the grounding of the 737 MAX, the Board failed to undertake its own evaluation of the safety of keeping the 737 MAX aloft. There were no substantive Board meetings about airplane safety. The Board did not even meet in the immediate aftermath of the Ethiopian Airlines Crash. Without the benefit of a

² Unless otherwise indicated, all emphasis in this Complaint has been added.

Board meeting, Muilenburg lobbied President Trump in an effort to prevent the FAA from grounding the 737 MAX. The Board did not receive a briefing about the basics of airplane safety and FAA certification until the end of April 2019, several weeks after the plane was grounded.

15. The Board compounded its lack of oversight by publicly lying about it. In May 2019, then-Lead Director, now-CEO David Calhoun led a public relations defense of Muilenburg and the Board in order to “[p]osition the Boeing Board of Directors as an independent body that has exercised appropriate oversight.” However, to do so, in a series of interviews with three leading national newspapers, Calhoun propagated an invented history of Board safety oversight and deliberation. Calhoun continued to praise Muilenburg publicly through November 2019.

16. Calhoun and the Board only stopped defending Muilenburg when they learned in December 2019 that his relationship with the FAA had ruptured and that the FAA would not soon recertify the 737 MAX. Even then, the Board acted in bad faith. The Board could have fired Muilenburg and saved \$38 million in unvested equity-based compensation. Instead, at a meeting absent legal counsel and substantive consideration, the Board simply allowed Muilenburg to “retire” and keep the money. By paying Muilenburg, the Board sidestepped a public spat

with him that unavoidably would raise questions about the Board's culpability in supporting him and not exercising safety oversight. Calhoun failed upward. The Board named him the new CEO.

17. The above misconduct—no Board-level safety reporting; ignoring red flags including the first 737 MAX crash; defrauding the FAA; frustrating the DOJ investigation; delaying disclosure to the FAA; no internal investigation or assessment of airplane safety; phony public relations campaigns; paying Muilenburg \$38 million to which he was not entitled; promoting Calhoun despite all of the above—reflects the arrogance of Boeing's long-time fiduciaries. The Board includes influential operators at the highest level of American business and government. Numerous longtime Boeing directors have chosen to remain in office despite the human tragedy of avoidable airplane crashes and non-litigation costs that Boeing has estimated at almost \$20 billion. In January 2021, the president of one of Boeing's largest customers, Emirates, gave an interview in which he stated that Boeing needs to make "fundamental structural changes" because "there is a top-down culpability and accountability" and "[c]learly there were process and practices, attitudes – DNA if you like – that need[] to be resolved at the top down."

18. A critical objective of the *Caremark* doctrine is to deter corporate catastrophes. When deterrence fails, *Caremark* provides a litigation remedy

against fiduciaries who in bad faith fail to oversee profit-seeking managers.

Boeing's officers and directors did not do their jobs, and they knew it. They failed to act in good faith to assure the existence of a functioning, Board-level reporting system respecting airplane safety. That failure resulted in hundreds of preventable deaths and massive economic damage to the Company.

PARTIES

A. Co-Lead Plaintiffs

19. Co-Lead Plaintiff Thomas P. DiNapoli is Comptroller of the State of New York, Administrative Head of the New York State and Local Retirement System, and Trustee of the New York State Common Retirement Fund ("NYSCRF"). NYSCRF is a public pension fund for the employees of New York State and local governments. Its assets totaled an estimated \$216.3 billion as of June 30, 2020. NYSCRF has been a continuous holder of Boeing stock at all relevant times. As of June 8, 2020, NYSCRF held approximately 1,186,627 shares of Boeing stock.

20. Co-Lead Plaintiff Fire and Police Pension Association of Colorado ("FPPA") is the Trustee for the Fire and Police Members' Benefit Investment Fund, which contains assets of governmental defined benefit pension plans for the purpose of providing benefits for Colorado firefighters and police officers and beneficiaries upon retirement, disability, or death. FPPA's net investible assets

totaled \$5.6 billion as of June 30, 2020. FPPA has been a continuous holder of Boeing stock at all relevant times. As of June 8, 2020, FPPA held approximately 9,165 shares of Boeing stock.

B. Nominal Defendant

21. Boeing is a global aerospace corporation that designs, manufactures, and sells commercial airplanes and other aviation equipment for the airline, and aerospace and defense industries. The Company operates in four reportable segments: (i) Commercial Airplanes; (ii) Defense, Space & Security; (iii) Global Services; and (iv) Boeing Capital. In 2017, the year prior to the Lion Air Crash, the Company reported approximately \$94.0 billion in revenue, of which approximately \$58.0 billion, or 61.7%, was generated from the Commercial Airplanes segment. In 2019, by comparison, Boeing's revenue had fallen nearly 20% to \$76.5 billion, and that of the Commercial Airplanes segment had dropped almost 45%, to \$32.5 billion.

C. Outside Director Defendants

22. Directorships at Boeing are lucrative and long-term and principally reserved for well-connected political insiders or present or former CEOs with financial expertise but no experience relevant to aircraft manufacturing. Recent non-party directors of Boeing include former Governor of South Carolina and former United States Ambassador to the United Nations Nikki Haley (a Boeing

director from May 2019 to March 2020) and former United States Secretary of Commerce William M. Daley (a Boeing director from 2006 to 2011, at which time he became White House Chief of Staff).

23. Defendant Kenneth M. Duberstein is a former White House Chief of Staff under President Ronald Reagan and a longtime principal of the lobbying firm The Duberstein Group, Inc. Washington Speakers Bureau touts Duberstein's "ultimate insider status." He served as a director of McDonnell Douglas from 1989 to 1997 and as a director of Boeing from 1997 to April 29, 2019. He was Lead Director of Boeing from 2005 to April 30, 2018. From 1997 to 2019, Duberstein received over \$5.3 million in compensation for serving as a Company director.

24. Defendant Mike S. Zafirovski served as a director of the Company from 2004 until May 2020. Zafirovski was a senior executive at Nortel Networks from 2005 to 2009. In 2007, he was appointed to the National Security Telecommunications Advisory Committee. From 2004 to 2019, Zafirovski received over \$4.2 million in compensation for serving as a Company director.

25. Defendant Arthur D. Collins Jr. has been a director of the Company since 2007, the same year he retired as CEO of Medtronic, Inc. From 2007 to

2019, Collins received over \$3.9 million in compensation for serving as a Company director.

26. Defendant Edward M. Liddy served as a director of Boeing from 2007 to 2008 and then again from 2010 to May 2020, after he had served as interim chairman and CEO of American International Group. He was previously the CEO of Allstate Corporation. Liddy simultaneously served as a director of Boeing and of three other major corporations, 3M Company, Abbott Laboratories, and AbbVie Inc. Liddy received over \$2.8 million in compensation for serving as a Company director.

27. Defendant Admiral Edmund P. Giambastiani Jr. is a former Vice Chairman of the Joint Chiefs of Staff. He has been a director of the Company since 2009. From 2009 to 2019, Giambastiani received nearly \$3 million in compensation for serving as a Company director.

28. Defendant David L. Calhoun has been a director of the Company since 2009. Beginning in January 2014, Calhoun was senior managing director and head of portfolio operations at The Blackstone Group. Calhoun was named Lead Director of Boeing on April 30, 2018, succeeding Duberstein. As part of management shakeups in the wake of the 737 MAX disasters, Calhoun was appointed Chairman of the Board on October 12, 2019 (until December 23, 2019),

and then as President and CEO of Boeing on January 13, 2020. From 2009 to 2019, Calhoun received nearly \$3.4 million in compensation for serving as a Company director. As Boeing CEO, Calhoun's annual salary is \$1.4 million, plus (i) an annual incentive payment targeted at \$2.52 million; (ii) a long-term incentive of up to \$9 million; (iii) additional incentive payments of up to \$7 million based on certain performance targets, including returning the 737 MAX to service; and (iv) restricted stock units valued at \$10 million.

29. Defendant Susan C. Schwab is a former United States Trade Representative under President George W. Bush. She has been a director of the Company since 2010. She simultaneously has served as a director of Marriott International, Caterpillar Inc., and FedEx Corporation. From 2010 to 2019, Schwab received over \$3 million in compensation for serving as a Company director.

30. Defendant Ronald A. Williams has been a director of the Company since 2010, the same year he retired as CEO of Aetna Inc. From 2011 to 2019, Williams received over \$2.9 million in compensation for serving as a Company director.

31. Defendant Lawrence W. Kellner has been a director of the Company since 2011. He was named non-executive Chairman of the Board on December 23,

2019, as part of the management shakeups at Boeing in the wake of the 737 MAX disasters. Kellner is a former CEO of Continental Airlines (from 2004 to 2009). From 2011 to 2019, Kellner received over \$2.3 million for serving as a Company director.

32. Defendant Lynn J. Good has been a director of the Company since 2015. During the entirety of her Boeing tenure, Good has been CEO of Duke Energy. In *Caremark* litigation naming Good as a defendant, which arose out of a \$102 million fine levied against Duke Energy for violations of the Federal Clean Water Act, Chief Justice Strine wrote in dissent: “Duke’s executives, advisors, and directors used all the tools in their large box to cause Duke to flout its environmental responsibilities, therefore reduce its costs of operations, and by that means, increase its profitability. This, fiduciaries of a Delaware corporation, may not do.” *City of Birmingham Ret. & Relief Sys. v. Good*, 177 A.3d 47, 65 (Del. 2017). The majority opinion affirmed a Rule 23.1 dismissal but stated: “None of this reflected well on Duke Energy.” *Id.* at 64. From 2015 to 2019, Good received over \$1.4 million in compensation for serving as a Company director.

33. Defendant Robert A. Bradway has been a director of the Company since 2016. He is the CEO of Amgen Inc. From 2016 to 2019, Bradway received more than \$1.1 million in compensation for serving as a Company director.

34. Defendant Randall L. Stephenson served as a director of the Company from February 2016 to December 2017. During his tenure at Boeing, Stephenson was chairman and CEO of AT&T Inc. From 2016 to 2017, Stephenson received nearly \$600,000 in compensation for serving as a Company director.

35. Defendant Caroline B. Kennedy was a director of the Company from 2017 until mid-January 2021. Kennedy is a former United States Ambassador to Japan. From 2017 to 2019, Kennedy received more than \$800,000 for serving as a Company director.

D. Officer Defendants

36. Defendant W. James McNerney Jr. was Boeing's CEO, President, and Chairman of the Board from 2005 until February 2016. From 2001 to 2016, McNerney received over \$240 million in compensation for his roles at Boeing. McNerney's retirement package entitled him to at least \$58.5 million over a subsequent ongoing fifteen-year period.

37. Defendant Dennis A. Muilenburg started working at Boeing in 1985. He became Vice Chairman, President, and COO in December 2013, CEO in July 2015, and began serving as CEO and Chairman of the Board in March 2016. As part of management shakeups in the wake of the 737 MAX disasters, Muilenburg lost his position as Chairman of the Board on October 11, 2019, and was allowed to retire on December 22, 2019. Between 2011 and 2019, Muilenburg received

more than \$120 million in compensation for his roles at Boeing. In December 2018, after the Lion Air crash, the Board awarded Muilenburg over \$31 million—the highest pay of his tenure—including a \$13 million cash award purportedly reflecting short and long-term performance.

38. Defendant Kevin G. McAllister was Executive Vice President of the Company and President and CEO of Boeing Commercial Airplanes (“BCA” or “Commercial Airplanes”) from November 2016 until his ouster on October 22, 2019, seven months after the Ethiopian Airlines Crash. From 2016 to 2017, McAllister received more than \$28 million in compensation from Boeing. He received a lump sum cash payment of \$14.75 million upon his departure.

39. Defendant Raymond L. Conner joined Boeing in 1977 and was vice chairman of Boeing from 2014 until his retirement in 2017, and President and CEO of BCA from 2014 until November 2016. From 2012 to 2017, Conner received more than \$57.5 million from Boeing.

40. Defendant Greg Smith has served as Boeing’s CFO since 2011. From 2011 to 2019, Smith received more than \$54 million from Boeing.

41. Defendant J. Michael Luttig served as Boeing’s EVP and General Counsel from May 2006 to May 2019. In May 2019, following the grounding of the 737 MAX, Luttig was named Counselor and Senior Advisor to CEO

Muilenburg and the Board. As part of management shakeups in the wake of the 737 MAX disasters, Luttig departed in December 2019. From 2011 to 2019, Luttig received more than \$59 million from Boeing.

42. Defendant Greg Hyslop has served as the Company's chief engineer since July 2016. He is a member of the Company's Executive Council and reports to the Company's President and CEO. His responsibilities include oversight of all aspects of safety and technical integrity of Boeing products and services. In 2018, Hyslop received more than \$8.5 million from Boeing.

43. Defendant Diana L. Sands has served as Senior Vice President of Boeing's Office of Internal Governance and Administration since April 1, 2014. She is a member of Boeing's Executive Council. As the Company's chief ethics and compliance officer, Sands leads Boeing's ethics, compliance, corporate audit and trade controls activities. Sands reports to Boeing's President and CEO and to the Audit Committee.

FACTUAL BACKGROUND

I. Boeing Jettisons Its Safety-Engineering Culture.

44. Boeing was founded by William Boeing in Seattle, Washington in July 1916. Over the next 80 years, Boeing essentially functioned as “an association of engineers.” As reported in *The Atlantic*, Boeing's executives “held patents,” “designed wings,” and were conversant in engineering requirements. The

culture of the Company was focused on safety, engineering, and the pursuit of learning. Boeing emerged as one of the largest global aerospace manufacturers.

45. A successor generation of Boeing leaders chose to dismantle its safety-engineering culture. A signal event was in 1997, when Boeing acquired McDonnell Douglas, another airplane manufacturer. McDonnell Douglas was at this time a dysfunctional corporate enterprise: its aircraft plant in Long Beach, California was falling apart, and it had a history of hiring engineers to meet tight deadlines and then firing them to make their numbers. McDonnell Douglas ceased operations after having developed a reputation for poor quality control at its factories, and for designing a commercial airplane that, over the course of 43 years, suffered more than fifty safety incidents, including fatal accidents in 1974 and 1979.

46. Although Boeing had purchased McDonnell Douglas, it was McDonnell Douglas's executives who ended up leading the combined entity. Boeing's CEO at the time, Phil Condit, remained in his position, but Harry Stonecipher, McDonnell Douglas's CEO, soon became Boeing's new President. As noted above, Kenneth Duberstein, a McDonnell Douglas director, eventually became Boeing's Lead Director.

47. Under Stonecipher's leadership, Boeing's culture shifted from safety-first to profits-first. Stonecipher, a former General Electric engine-division chief who headed McDonnell Douglas for three years, immediately made his presence felt by questioning Boeing's processes, and focusing on costs-cutting rather than designing airplanes. Stonecipher put it best himself: "When people say I changed the culture of Boeing, that was the intent, so that it's run like a business rather than a great engineering firm." His cultural transformation marginalized engineers as a class and airplanes as a business, and replaced the ethos of "Boeing family" with "Boeing team." Employees were instructed to perform, or otherwise they would be cut from the team.

48. Stonecipher's cost-cutting style led to employee disenchantment and departures. In 2000, Boeing's engineers staged a 40-day strike to improve Company culture and regain a voice in decision-making. The strike's aftermath exacerbated tensions: returning strikers were wary of their bosses and managers felt betrayed. A series of resignations ensued as longtime technical employees and others who had been with the Company for decades walked out.

49. Boeing also saw a sharp increase in safety violations imposed by the FAA beginning in the early 2000s. Between 2000 and 2020, Boeing's twenty airplane safety violations included poor quality control, poor maintenance,

installing parts not compliant with regulation, and failing to provide airline clients with crucial safety information. The fines for these violations ranged from \$6,000 to more than \$13 million. By comparison, during the same period Airbus, Boeing's primary competitor, received just three safety violations from the FAA, none of which related to quality control or regulatory non-compliance.

50. Boeing's new leadership not only shifted the Company's culture away from engineering, it physically moved the senior management team away from Boeing's engineers and production facilities. In 2001, Condit and Stonecipher relocated Boeing's Seattle headquarters, the base where the majority of the Company's over 40,000 engineers lived and worked, and where the jets were assembled, to Chicago. Top management and staff, approximately 500 people, were re-assigned to the new location. Condit explained the move in a manner consistent with the desire to escape the influence of Boeing's engineers: "When the headquarters is located in proximity to a principal business—as ours was in Seattle—the corporate center is inevitably drawn into day-to-day business operations."

51. Stonecipher's Boeing culture revamp brought with it a series of public scandals. The rocket division was found to be in possession of stolen Lockheed Martin documents. Boeing's CFO was convicted of violating federal procurement

laws. Then-CEO Condit was forced out and replaced by Stonecipher, who himself would not remain in charge for long after his own career-ending scandal with a married employee.

52. In 2005, Defendant W. James McNerney Jr. replaced Stonecipher as Boeing CEO. At McNerney's request, General Counsel Doug Bain delivered a speech to Boeing's leadership in January 2006 about Boeing's major scandals. Bain reported that "there are some within the prosecutors' offices that believe that Boeing is rotten to the core. They talk to us about pervasive misconduct They talk about it in terms of levels within the company that go from non-management engineers to the chief financial officer." Bain continued:

The recurring message we have gotten from the prosecutors and frankly everybody else we deal with is one of shock and surprise. They say, 'You guys are the Boeing Company. You build things that are larger than life. You do things that are larger than life. You're not a sleazy company. How did this happen?' And the question that they always ask: Where was the leadership?

53. McNerney had no technical background. He got his start in brand management at Proctor & Gamble before becoming a protégé of Jack Welch at General Electric. Aerospace analyst Richard Aboulafia identified the combined impact of the move to Chicago and the accession of McNerney: "You had this weird combination of a distant building with a few hundred people in it and a non-engineer with no technical skills whatsoever at the helm."

54. Soon after assuming his role, McNerney began to push for a new airplane: the 787 Dreamliner. The 787 Dreamliner was slow to develop and massively over budget. Boeing understaffed the project and sub-contracted several key components. The FAA grounded the 787 Dreamliner a little over a year after its debut following a series of lithium-ion battery fires.

55. Stan Sorscher, a longtime Boeing physicist and negotiator for the aviation engineers' union, the Society for Professional Engineering Employees in Aerospace, issued powerful reports about the erosion of the Company's corporate culture. He later explained:

If your business model emphasizes productivity, employee engagement, and process improvement, costs go down faster. This was the essence of the "quality" business model Boeing followed in the mid-90s.

The 777 had the best "learning curve" in the business. On the other hand, if your industry is mature, and your products are commodity-like, business school theory says a cost-cutting model is appropriate.

Wal-Mart perfected its particular version of the cost-cutting business model. Amazon adapted that model to its industry. Boeing has adapted it to high-end manufacturing.

56. According to Sorscher, the 787 Dreamliner epitomized Boeing's cultural rebirth as a cost-cutting enterprise. Far more dramatic in all ways, the 737 MAX catastrophe is a direct consequence of deliberate decisions to prioritize profit and marginalize innovation, performance, and safety.

II. Boeing Lacked Any Board-Level Oversight of Airplane Safety Prior To the Grounding of the 737 MAX.

57. For an airplane manufacturer, flight safety is essential and mission-critical. Yet, the Board of America’s premier aircraft developer, manufacturer, and seller categorically failed to exercise oversight of safety and ignored its obligation to monitor safety. According to former Boeing director John H. Biggs, who retired in 2011, the “board doesn’t have any tools to oversee” safety. The Board-level safety systems created in 2019 following the grounding of the entire 737 MAX fleet highlight the prior woeful absence of mission-critical safety monitoring mechanisms.

A. No Board Committee Was Responsible for Airplane Safety Oversight.

58. From 2011 until August 2019, the Board had five standing Committees to monitor and oversee specific aspects of the Company’s business but not one oversaw safety. Each of the Committee charters—(i) Audit, (ii) Finance, (iii) Compensation, (iv) Special Programs, and (v) Governance, Organization and Nominating—is silent as to airplane safety.

59. The Audit Committee handled risk oversight, including “evaluat[ing] overall risk assessment and risk management practices,” “perform[ing] central oversight role with respect to financial statement, disclosure, and compliance risks,” and “receiv[ing] regular reports from [Boeing’s] Senior Vice President,

Office of Internal Governance and Administration with respect to compliance with our ethics and risk management policies.”

60. From the development of the 737 MAX to its grounding, the Audit Committee Charter never mentioned oversight of “safety.” Instead, it focused primarily on financial risks, despite the breadth of its mandate, which included oversight of the Company’s compliance and regulatory requirements.

61. The Audit Committee Charter lists committee responsibilities, including the following:

a. “Obtain and review, on an annual basis, a formal written report prepared by the independent auditor describing [Boeing’s] internal quality-control procedures.”

b. [Review] “[a]ny material issues raised by the most recent internal quality-control review, or peer review, of [Boeing], or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by [Boeing]....”

c. “Discuss with management the Company’s policies, practices and guidelines with respect to risk assessment and risk management.”

d. “At least annually receive reporting by the [Senior Vice President, Office of Internal Governance and Administration] on the Company’s

compliance with its risk management processes, and by the General Counsel on pending Law Department investigations of alleged or potentially significant violations of laws, regulations, or Company policies.”

e. “Meet with the [Senior Vice President, Office of Internal Governance and Administration] to review the Company’s ethics and business conduct programs and the Company’s compliance with related laws and regulations.”

62. The Audit Committee was also required to regularly report to the Board on the topics for which it had oversight, including “the Company’s compliance with legal or regulatory requirements,” and “the implementation and effectiveness of the Company’s ethics and compliance programs to support the Board’s oversight responsibility.”

63. Notwithstanding that the Audit Committee was responsible for risk oversight, during the years-long development of the 737 MAX, the Audit Committee failed to discuss product safety issues related to the design, development, or production of the 737 MAX, or ask for presentations on the topic. Instead, Audit Committee presentations focused on whether Boeing’s supply chain could meet its production targets, and whether the Company had liquidity and

capital assets available to fund its aggressive production rates for the 737 MAX, and other classes of airplane.

64. The Audit Committee received a yearly update on the Company's compliance risk management process, but that process did not include oversight of airplane safety. For example, a February 2011 audit plan focused on "production rate readiness activities" and "supplier management rate readiness" as the main audits for that year. In 2014 and 2017, when the Board discussed audit plans, there was no discussion of airplane safety or the need to conduct audits of safety reporting and safety issues.

65. Even after the Lion Air Crash, the risk management update presented by chief compliance officer Sands to the Audit Committee in December 2018 did not identify product safety as a "compliance risk" for 2018.

66. The Audit Committee did not review whistleblower complaints relating to product safety; nor did any other Board committee. The Audit Committee's predominant role with respect to whistleblowers was to assess audit- and financial accounting-related complaints.

67. The absence of a Board committee designated to oversee airplane safety stands in stark contrast to safety committees at a number of airlines:

- Southwest Airlines instituted a Safety & Compliance Oversight Committee “to assist the board in overseeing the company’s activities with respect to safety and operational compliance” in November 2009.
- Delta Airlines instituted a Board-level Safety and Security Committee in 2010, to “oversee and consult with management regarding overall customer, employee and aircraft operating safety and security goals, performance and initiatives.”
- United Airlines has a long-standing Public Responsibility Committee explicitly tasked with “review[ing] the Company’s policies and positioning with respect to safety, corporate social responsibility and governmental affairs.”
- JetBlue established an Airline Safety Committee in 2009, and adopted the first official committee charter on September 15, 2010.
- Spirit Airlines established a Safety, Security, and Operations Committee in 2015, “to assist the Board in overseeing the Company’s activities, programs and procedures with respect to safety, security and airline operations.”

- Alaska Airlines established a Safety Committee in November 2000, “to assure the Board of Directors and the Company’s shareholders that Alaska Air Group believes that airline safety is the highest responsibility of every employee of the Company and its subsidiaries, and that it seeks to realize its goal to be number one in airline safety and compliance.”

68. It was not until April 4, 2019, in the wake of the grounding of the 737 MAX, that the Board established the Committee on Airplane Policies and Processes (the “Airplane Committee”). The creation of the Airplane Committee marked the *first Board-level effort* at monitoring safety, or developing systems and policies to ensure that safety issues were reported to the Board.

69. The Airplane Committee’s fact-finding sessions intended to inform the Committee’s conclusions and recommendations, were sparsely attended. Giambastiani was the sole Board attendee at more than half of the Committee’s eighteen fact-finding sessions with internal and external experts, including on critical topics such as airline training requirements and an overview of BCA’s safety process.

70. Between April and August 2019, there were presentations to the Airplane Committee on seven new topics—including “[c]ommercial airplane

design and manufacturing and policies and processes,” “aircrew training requirements,” and “engineering and safety organizational structures in related industries”—none of which had been the subject of previous briefings.

71. Among those presentations was one in April 2019 from Lynne Hopper, Boeing’s Vice President of BCA Engineering, and Beth Pasztor, BCA’s Vice President of Safety, Security & Compliance, who presented an overview of the airplane certification process to the Airplane Committee. The presentation opened with a primer entitled: “What is Certification”? This was the first time any Board Committee had heard from Pasztor or Hopper, despite their roles leading engineering and safety, respectively, for Boeing’s largest segment.

72. The Airplane Committee was the first committee to formally request information about the cause of the crashes. On May 6, 2019, its chair, Giambastiani, asked Hyslop to provide information about pilot training requirements, Boeing’s “Quick Action” checklists for emergencies, and airlines that had purchased an alert respecting a plane’s angle of attack (“AOA disagree alert”) (addressed further *infra*).

73. On August 26, 2019, on the recommendation of the Airplane Committee, the Board established the Aerospace Safety Committee “for the purpose of assisting the Board in the oversight of the safe design, development,

manufacture, production, operations, maintenance, and delivery of the aerospace products and services of the Company.” The Aerospace Safety Committee’s responsibilities included the certification process and Company protocols for engaging with the FAA.

B. Internal Safety Reporting Did Not Reach Any Board Member.

74. Prior to 2019, Boeing’s principal internal safety reporting process was the Safety Review Board (“SRB”). Without either a Board-level reporting mechanism, or a process for ensuring that safety-related decisions were elevated to the Board, safety issues reported to the SRB did not come to the Board’s attention.

75. SRB members include Boeing’s Program Functional Chief Design Engineer, the Chief Pilot, the Chief Project Engineer, and the Product Safety Chief Engineer. The SRB received presentations from employees of Boeing’s Airplane Safety Engineering subdivision. An employee identifying a putative “Safety Issue” could prepare a report describing the issue, which the employee or the employee’s supervisor presented to the SRB. The SRB ultimately evaluated whether the reported issue was “sufficient to identify [as] a Safety Issue.”

76. Only in 2019, after the grounding of the 737 MAX, did the Board learn of the existence of the SRB and hear about the Airplane Safety Engineering subdivision.

77. The initiation of Board-level safety reporting arose following the grounding of the 737 MAX. On the evening of March 15, 2019, director Collins sent two emails to then-Lead Director Calhoun (attached as Exhibit C hereto) about the need for a full board meeting devoted to airplane quality and safety. Collins's advice to Calhoun reflected their shared knowledge from serving together on the board of medical device manufacturer Medtronic: board-level safety reporting was important, yet was missing at Boeing. Collins wrote:

I have a suggestion for your consideration that relates to the agenda for the next Boeing board meeting on April 28-29. In light of the two 737 MAX 8 crashes and subsequent global fleet grounding, the previous grounding of the Air Force KC-46 tankers, and the Amazon cargo plane crash, *I believe we should devote the entire board meeting (other than required committees and reports) to a review of quality within Boeing.* This would start with an update on what we know about each of the three previously mentioned situations, but then include a review of quality metrics and actions that are either currently in place or planned to assure that the highest level of quality is designed into all Boeing products and incorporated into all manufacturing, customer training, and service support activities. In addition to providing the necessary information for the board, this type of agenda would underscore the board's (and management's) unwavering commitment to quality and safety above all other performance criteria. I recognize this type of approach needs to be communicated carefully so as to not give the impression that the board has lost confidence in management (which we haven't) or that there is a systematic problem with quality throughout the corporation (which I don't believe there is), but I'm sure this can be done. I am happy to discuss this idea in greater detail if you wish; otherwise, I'll leave the decision in your hands after consultation with Dennis.

One more thought in the category of “lessons learned.” *As you will remember from your time as a Medtronic board member during my tenure as CEO, I began each board meeting, executive committee meeting, and operating review with a review of product quality/safety—before any discussion of financial performance, market share/competitive activities, new product development timetables, and certainly stock price. Employees (and many times customers) paid close attention to the priorities of senior management, and everyone in the corporation understood that nothing was more important to the CEO and the board than quality/safety. It’s hard to quantify the impact of this approach, but it certainly was important.*

78. Calhoun forwarded Collins’s email to Muilenburg, who stated that he had “added our Safety data to the Board lead-off briefing, and just added it to my monthly Board note too.”

79. The Board’s next regularly scheduled meeting after the 737 MAX grounding was on April 28-29, 2019. The Ethiopian Airlines Crash—and, specifically, what it meant for the Company going forward—was the main topic of conversation for the Board. Approximately two hours and fifteen minutes were dedicated to discussing the 737 MAX—including, for the first time, MCAS, the FAA certification process, and pilot training requirements.

80. Overall, twelve people presented about the 737 MAX and responded to questions from the Board. The presentations revealed the Board’s lack of prior knowledge of safety and compliance issues central to the Company’s core product.

For example, a presentation by McAllister discussed how MCAS was used only on the 737 MAX.

81. In late June 2019, Giambastiani proposed that product safety reports evaluated by the SRB “should feed to [A]udit [C]ommittee. [S]hould go to CTO/CFO and shared with Board,” that the Audit Committee should have “visibility of high risk issues,” and that “the entire list of safety issues on the MAX [should be] reported to Dennis [Muilenburg]/Greg [Hyslop].”

82. In a July 2019 email to McAllister, Hyslop, and Smith, and other senior Boeing officials, Muilenburg wrote:

As part of our lessons learned from the MAX, we need to have a clear understanding of how safety risk is being assessed, and appropriately “test” those items that are assessed as “medium” or at a “minor” or “major” hazard level to ensure the right visibility/action/communication.... This is an exceptionally important process improvement area for us all.

83. In late 2019, Muilenburg began to receive “granular weekly reports of potential safety issues discussed at meetings of rank-and-file engineers - something that did not happen in the past.” A presentation at the October 20, 2019 Board meeting reflected a reporting process for product safety concerns that ultimately reported up to executives and the Board.

84. At congressional hearings held on October 29-30, 2019, Muilenburg testified that access to better information would have supported grounding the 737

MAX fleet shortly after the Lion Air crash: “if we knew back then what we know now, we would have grounded right after the first accident.”

85. At the December 15, 2019 meeting, the Audit Committee received a compliance risk management report from chief compliance and ethics officer Sands that, *for the first time*, included a category for “Safety.” Sands’s report from December 2018, six weeks after the Lion Air Crash, had not covered product safety at all, much less identifying it as a compliance risk area.

C. The Board Had No Whistleblower Reporting System.

86. The Board had no mechanism to receive, inquire into, or address whistleblower complaints relating to the quality or safety of Boeing’s airplanes. The Board had no knowledge of the whistleblower complaints below regarding the 737 MAX prior to the Lion Air crash.

87. In summer 2018, Ed Pierson, a longtime general manager and engineer at the Renton, Washington plant where the 737 MAX was assembled, tried to raise safety concerns about 737 MAX development with his superiors. He contacted Scott Campbell, Vice-President and General Manager of the 737 Program and the Renton factory leader about “Recovery Operations & Safety Concerns.” Pierson wrote: “right now all my internal warning bells are going off. . . . And for the first time in my life, I’m sorry to say that I’m hesitant about putting my family on a Boeing airplane.”

88. Pierson identified two concerns: an exhausted workforce, and program schedule pressure. Aggressive production schedules were “creating a culture where employees are either deliberately or unconsciously circumventing established processes. These process breakdowns come in a variety of forms adversely impacting quality.” Pierson recommended that Campbell tell employees working on the 737 MAX that delivery schedules are “not nearly as important as building the highest quality product and working safely,” and that he shut down the 737 MAX production line in order to “allow our team time to regroup so we can safely finish the planes outside and then shift our attention to the planes inside.”

89. When Campbell met Pierson to discuss these recommendations to ensure the safety of the 737 MAX aircraft assembled in Renton, Pierson said he had “seen larger operations shut down for far less safety issues . . . in the military and those organizations have national security responsibilities.” Campbell’s response was to remind Pierson that “the military isn’t a profit making organization.” Pierson retired from Boeing soon thereafter. There is no evidence that any of his recommendations were implemented or seriously considered by Boeing, or that his complaints were otherwise discussed with the Board.

90. Separately, in 2018, [REDACTED] a Boeing engineering manager working on the 737 MAX, expressed frustration to Director of Global Operations

██████████ that Boeing had selected “the lowest cost supplier and sign[ed] up to impossible schedules,” which reflected unrelenting and dangerous economic pressure from senior management:

I don't know how to fix these things . . . it's systemic. It's culture. It's the fact that we have a senior leadership team that understand very little about the business and yet are driving us to certain objectives. . . . Sometimes you just have to let things fail big so that everyone can identify a problem . . . maybe that's what needs to happen rather than just continuing to scrape by.

91. In July 2018, Boeing's Test and Evaluation department voiced concerns to “Boeing Executive Leadership” regarding the “considerable pressure” the 737 MAX program faced over production schedules. The department's letter identifies the “ero[sion of] safety margins” due to the declining average experience among senior production pilots. Employee Relations Director ██████████ forwarded the communication to defendant Hyslop, Boeing's chief engineer, but ██████████ mischaracterized the letter as seeking mainly compensation and additional benefits, without flagging the safety concerns of overworked employees.

92. Additionally, in November 2018, after the Lion Air Crash, ██████████ ██████████ a Quality Assurance Inspector and nearly 30-year Boeing veteran, recounted mistreatment “for reporting serious quality problems,” explaining that “[n]o one should have to go through this when trying to do what is right – to assure the quality of our product.” He added, “I have stood alone during these past

months trying to assure that we have addressed these quality issues. I had only hoped that management would have stood with me.” ██████ identified another whistleblower, ██████ a former quality specialist and compliance monitor, whom he said was also harassed in retaliation for reporting of “quality concerns” related to the 737 MAX.

93. On September 30, 2019, at the Aerospace Safety Committee’s recommendation, Boeing created a Product and Services Safety Organization that was responsible for, among other things, investigating “cases of undue pressure and anonymous product and service safety concerns raised by employees.” The Product and Services Safety Organization represented the first mechanism or reporting line to convey employee complaints to the Board.

D. FAA Regulatory Scrutiny Was No Replacement for Internal Safety Oversight.

94. The Board could not in good faith rely on FAA regulation to ensure the safety of the Company’s aircraft. On the contrary, the FAA relied on Boeing to self-regulate and to provide accurate information to the FAA. Additionally, Boeing’s immense political influence meant that the Company often got its way with the FAA, even for practices inimical to public safety.

95. Pursuant to an FAA program called Organization Designation Authorization (“ODA”), the FAA permits some airplane manufacturers, including

Boeing, to “self-certify” compliance with certain regulations. The ODA program allowed Boeing to exercise outsized influence over the FAA, including over critical safety decisions about the 737 MAX. The ODA program was instituted in 2005, when the FAA began delegating various types of compliance issues to Boeing, including major repairs and alterations, as well as critical tests involving safety and flight control design.

96. An active and influential proponent of the ODA program, Boeing lobbied extensively for an expansive version that would shed both any review and an expiry date.

97. Government watchdogs criticized the delegation program, and in 2006, the Government Accountability Office (“GAO”) issued a report criticizing the ODA program. The GAO report correctly predicted that the proposed expanded ODA program would “remove FAA from direct oversight of the individuals performing the delegated activities” and that “it will be important for the agency to adhere to its policy of using designees only for less safety-critical work.”

98. In 2009, the FAA created the Boeing Aviation Safety Oversight Office, a forty-person bureau in Seattle dedicated to serving Boeing, led by an FAA employee named Ali Bahrami. Four years later, Bahrami left the FAA to

take a job with the Aerospace Industries Association, which lobbies for Boeing and other manufacturers.

99. In 2011, the Department of Transportation’s Inspector General (“IG”) issued a report following a two-year audit of the ODA program. The IG report concluded that, under the ODA program, the “FAA has significantly reduced its role in approving individuals who perform work on FAA’s behalf by further delegating this approval to . . . aircraft manufacturers.” The report noted that “with less FAA involvement in the . . . process, there is also potential risk that [aircraft manufacturers] could appoint [delegated workers] with inadequate qualifications or a history of poor performance to approve certification projects.”

100. Notwithstanding these findings, Boeing’s oversight by the FAA further weakened and the distinctions between the two increasingly blurred. In 2012, the IG found that:

a. the FAA had “too close a relationship with Boeing officials” and was not properly exercising oversight of Boeing;

b. the FAA circumvented its own division tasked with oversight of certain types of airplanes (including Boeing’s) in reviewing Boeing appeals of decisions to FAA headquarters; and

c. the FAA had not issued timely airworthiness directives requiring Boeing to address safety issues.

101. FAA hierarchy sided with Boeing over the FAA's own employees. A congressional investigation recently revealed that FAA management overruled the determination of its own technical experts at Boeing's behest during the design and development of the 737 MAX and the 787 Dreamliner: "In these cases, FAA technical and safety experts determined that certain Boeing design approaches on its transport category aircraft were potentially unsafe and failed to comply with FAA regulation, only to have FAA management overrule them and side with Boeing instead."

102. With the benefit of a compliant FAA, Boeing continued to avoid crucial safety procedures and oversight. In a 2013 GAO Report, the FAA was found to have delegated 90% of its certification compliance authority to Boeing. By 2018, more than 95% of compliance authority was being delegated.

103. A House of Representatives investigation documented multiple instances in the 737 MAX program where Boeing authorized representatives, who had been granted authority to manage self-certification pursuant to the ODA program, "failed to represent the interests of the FAA in carrying out their FAA-delegated functions."

104. Additionally, FAA oversight depended on Boeing employees conveying accurate information to the FAA. The Board could not place sole reliance on the FAA to ensure airplane safety given that the FAA was relying on the candor and good faith of Boeing employees who were under pressure from their bosses at Boeing to minimize the impact of FAA scrutiny.

105. For example, as discussed in more detail below, Forkner felt tremendous pressure to interact with the FAA in a manner that would not cause the FAA to demand more than “Level B” pilot training for the 737 MAX. He wrote to another Boeing employee in December 2014, while the 737 MAX was under development, “if we lose Level B [it] will be thrown squarely on my shoulders. It was Mark, yes Mark! Who cost Boeing tens of millions of dollars!”

106. The DOJ’s press release accompanying the 2021 DOJ Agreement with Boeing describes how Forkner and another flight technical pilot deceived the FAA Aircraft Evaluation Group (“FAA AEG”):

In and around November 2016, two of Boeing’s 737 MAX Flight Technical Pilots, one who was then the 737 MAX Chief Technical Pilot and another who would later become the 737 MAX Chief Technical Pilot, discovered information about an important change to MCAS. Rather than sharing information about this change with the FAA AEG, Boeing, through these two 737 MAX Flight Technical Pilots, concealed this information and deceived the FAA AEG about MCAS. Because of this deceit, the FAA AEG deleted all information about MCAS from the final version of the 737 MAX FSB Report published in July 2017. In turn, airplane manuals and pilot training

materials for U.S.-based airlines lacked information about MCAS, and pilots flying the 737 MAX for Boeing's airline customers were not provided any information about MCAS in their manuals or training materials.

107. It was incumbent on the Board to create and monitor internal safety-oversight mechanisms and reporting structures so that Boeing employees were not incentivized to do their utmost to evade FAA scrutiny.

III. Prior to the Rollout of the 737 MAX, the Board Was On Notice of Red Flags Relating To the Safety of Its Commercial Airplanes.

108. The Board failed to implement safety oversight mechanisms despite red flags concerning major safety issues within the Commercial Airplanes division. Between 2013 and 2016—while Boeing was developing and manufacturing the 737 MAX—the Company had a series of safety-related issues with other airplanes that put the Board on notice it should be exercising active oversight of safety, regulatory compliance, and quality control.

A. Inadequate Training Manuals Are Blamed for the Crash of a Boeing 777 in 2013.

109. On July 6, 2013, a Boeing 777 airplane operated by Asiana Airlines crashed into a seawall on approach to the runway at San Francisco International Airport. Three passengers were killed, and 49 passengers and crew were seriously injured. The crash was widely reported in prominent media outlets.

110. The National Transportation Safety Board (“NTSB”) concluded in June 2014 that the crash had in part been caused by Boeing’s failure to describe the “complexities of the airplane’s autopilot and autothrottle” systems in its plane documentation and training manuals. According to the NTSB investigation, Boeing’s documentation and training manuals on the autothrottle were not sufficiently detailed, and thus pilots did not understand how the critical system worked. The NTSB criticized Boeing’s documentation, explaining, among other things, that (i) not only was the operation of the autothrottle not clear but it could not be inferred from Boeing’s description; and (ii) it was vital for flight crews to have a complete understanding of the system functionality and the effects of changes that they can make, particularly during critical phases of flight.

111. The NTSB expressly recommended that Boeing improve flight crew training, revise its 777 Flight Crew Operations Manual to explicitly explain and demonstrate the circumstances in which the autothrottle would not control the airplane’s airspeed, and examine the functionality of the control systems. The results of the NTSB investigation were widely reported in national media.

112. No Board materials reflect any discussion of the Asiana Airlines 777 crash or the results of the NTSB investigation recommending changes to Boeing’s flight crew training and manuals.

B. Grounding of the 787 Dreamliner

113. In January 2013, a year after the 787 Dreamliner came into service, the FAA grounded Boeing's 787 Dreamliner planes for three months due to fires started by overheating lithium-ion batteries installed in the planes. The 787 Dreamliner grounding was the first time the FAA had grounded an entire class of airplanes since 1979.

114. Despite the grounding of the 787 Dreamliner, the Board did not increase oversight of product safety issues. When the Audit Committee met on January 28, 2013, it did not discuss the 787 Dreamliner. Board members inquired about the lithium-ion battery issue at meetings, but did nothing to introduce Board-level safety monitoring mechanisms.

115. On November 21, 2014, the NTSB issued a full report on the 787 Dreamliner battery fires. Among the NTSB's conclusions was that Boeing had made misleading and unfounded claims about the lithium-ion battery system in its safety assessment reports to the FAA. The NTSB also revealed that Boeing's certification engineers working under ODA authority did not properly test the lithium-ion battery system for high-temperature situations, and that Boeing's safety assessment was insufficient and did not account for vulnerabilities of the battery that, in the NTSB's opinion, would have been discovered with better diligence.

116. The NTSB told the Company to “modify [its] process for developing safety assessments for designs incorporating new technology to ensure that the conclusions made are validated and that any identified deficiencies are corrected.” The NTSB findings were widely reported.

117. The Board did not address the NTSB report or make any recommendations or request discussions relevant to the NTSB findings regarding Boeing’s inadequate safety assessments.

C. Qatar Airways Refuses to Accept Planes Manufactured at Boeing’s South Carolina Plant.

118. In 2014, *Al Jazeera* reported that an unidentified customer—later revealed to be Qatar Airways—complained about the lack of quality control in Boeing’s Charleston plant and refused to accept any Boeing 787 Dreamliner airplanes manufactured at the facility. The same investigative report revealed that multiple anonymous employees in Charleston stated that they would not fly on planes assembled in that facility.

119. Boeing issued a statement in September 2014 that did not refute any factual contention in the investigative report. *Al Jazeera* won the Association for International Broadcasting (“AIB”) award for “International Current Affairs” in 2015 for its reporting on Boeing’s 787 Dreamliner, which AIB described as “a

disturbing tale of corporate greed as the world's major aircraft manufacturer put profit ahead of safety.”

120. There is no record of any Board discussion respecting a major customer refusing to accept any Boeing 787 Dreamliner airplanes manufactured at the Charleston plant.

121. For years, employees reported ineffective quality control and poor inspections at the South Carolina factory, in particular reports of “foreign object debris” (such as nuts, bolts, and wrenches) left in airplanes after they were assembled. Foreign object debris poses a significant safety risk for an airplane.

122. The Audit Committee received occasional brief summaries of “foreign object debris audits.” One internal Boeing memo notes that the repeated discovery of foreign object debris by the Air Force was “a chronic problem.” But the Audit Committee meeting minutes reveal no discussion of the foreign object debris, and the full Board never received reports on it before April 2019.

D. Boeing's 2015 Settlement With the FAA

123. In late 2015, Boeing entered into the FAA Settlement, a five-year, \$12 million settlement to resolve thirteen separate pending or potential civil enforcement cases relating to quality control, safety protocol violations, and manufacturing errors in the production lines. Up to \$24 million in additional fines were deferred pending Boeing's implementation of “additional significant systemic

initiatives, to strengthen its regulatory compliance processes and practices.” The FAA Settlement is the second largest in FAA history for regulatory violations. It was superseded in January 2021 by Boeing’s DOJ Agreement. (Indeed, the DOJ’s Agreement with Boeing cited the 2015 FAA Settlement as part of Boeing’s “prior history of misconduct” in its “relevant considerations” in determining the criminal fine.)

124. The FAA investigation and settlement arose from the discovery of significant quality issues, safety protocol violations, and manufacturing errors in Boeing’s production lines, and Boeing’s failure to take appropriate corrective action to address the problems. Many of the problems raised serious questions about the safety of Boeing’s aircraft. For example, Boeing repeatedly failed to meet deadlines in action plans it submitted to the FAA to address safety issues, sometimes by years. Boeing even missed a deadline for compliance with fuel-tank regulations that were enacted to address issues that caused a Boeing 747 fuel tank to explode in 1996, killing all 230 people aboard. Additionally, an FAA audit of 787 Dreamliner production processes found that Boeing’s corrective action to address improperly installed fuel line connectors, many of which were missing parts or installed backwards, was “insufficient to prevent further occurrences.” After multiple airlines found heavy fuel leaks on 787 Dreamliners in passenger

service, the FAA issued an Airworthiness Directive warning airlines that the situation was “unsafe” and ordering immediate inspection of the fuel connections on all 787 Dreamliners to prevent possible fuel fires. Following that directive, airlines found five more 787s with the faulty fuel couplings.

125. The FAA Settlement was unprecedented in its scope and its requirement of ongoing future remediation. When announced in December 2015, the *Wall Street Journal* noted “[t]he agreement is unusual because it raises questions about how Boeing’s commercial-airplane unit has implemented some of its core quality, safety and compliance programs.” The article further explained “[t]he broad nature of the agreement—combined with the extensive and continuing reporting requirements imposed on Boeing—sets it apart from past settlements involving manufacturers.” An aviation safety consultant assessed the FAA Settlement’s broader findings about Boeing as: “If the culture is, ‘We’ve got to get it out the door,’ and we start creating workarounds and normalized deviations from required procedures, that’s a culture that it is far more likely to experience serious safety issues.”

126. The FAA Settlement was a red flag that the Commercial Airplanes division’s safety and compliance programs were deficient. Passing references to the FAA Settlement appear in some Audit Committee materials, but the minutes

reflect no discussion of the FAA Settlement. At most, the Audit Committee only received high-level updates on the nature of the FAA Settlement. There were no Board-level policy recommendations to address the FAA Settlement's requirements or how they might be implemented.

IV. Board Oversight of the Development of the 737 MAX Is Focused on Profits, Not Safety Risks.

127. Throughout the period of the development of the 737 MAX, the Board received reports about aircraft development. The focus of these reports was on elements of profitability—such as cost control, production schedules, and market share—and not on safety issues or FAA compliance.

128. For example, a Board presentation of August 27, 2012 respecting the 737 MAX contains the tagline “*Performance, schedule, and cost certain ... Stingy with a purpose.*” Board presentations from February 24, 2014 and June 23, 2014 respecting the 737 MAX state that “Watch items” are “Non-recurring and recurring costs” and “Market share.” The Board presentation of October 26, 2015 refers to the “Imperatives” of “Break Cost Curve,” “Faster to Market,” and “Affordability Culture.” A Board presentation respecting the 737 MAX of December 14, 2015 refers to “Business case improvements driven by unit cost and non-recurring reductions.” Board presentations of October 31, 2016, and February 26, 2018 refer to “break the cost curve.” A report to the Board dated October 26, 2016 states that

the 737 MAX program “remains focused on rate increases and the MAX ramp-up.” Board presentations dated August 28, 2017, October 30, 2017, and December 11, 2017 contain the following headline respecting the 737 MAX: “Execute MAX 8 Ramp,” with information about deliveries. A Board presentation dated February 26, 2018 contains the following tagline respecting the 737 MAX: “*Transforming production system to support market demand.*”

129. As discussed below, there were two business imperatives within Boeing respecting the development of the 737 MAX that led to the mass production of a plane that could readily confront pilots with a surprise crisis seemingly out of their control: (i) maintaining “commonality” with the prior version of the 737, the NG; and (ii) limiting the extent of pilot training. These imperatives drove design changes and marketing decisions that sped up FAA certification, but left pilots in the dark and unprepared for a potential catastrophic failure.

A. **To Save Money, Expedite FAA Certification, and Stay Competitive with Airbus, the Board Decided To Re-Design the 737.**

130. In 2010 and early 2011, Boeing considered two options for updating its existing 737 NG model: either develop an entirely new airplane or re-design the current model with larger, more efficient engines.

131. The choice was informed by increased competition from Airbus, which had emerged as a serious competitive threat, with sales surpassing Boeing's. In 2008, Airbus had delivered 483 planes, to Boeing's 375. Airbus's fuel-efficient A320neo, announced in 2010, was selling well and quickly gaining ground on Boeing's 737, which had last been updated in the late 90s.

132. In early 2011, American Airlines CEO Gerard Arpey told Boeing CEO McNerney that American Airlines was considering buying hundreds of new, fuel-efficient jets from Airbus, and that Boeing would need to move more aggressively and quickly to keep its business. Boeing's focus turned from developing a new commercial plane, a process that could take a decade, to updating the 737, which could be done in six years.

133. The Board and senior management considered the potential re-design of the 737 NG on June 27, 2011. BCA Head Jim Albaugh touted the gains in fuel efficiency, the non-recurring investment costs, reduced capital costs, and expedited schedules for the re-design (called "re-engine" in the Board materials, because the engines would be larger and more fuel-efficient) of the existing 737 plane as compared to the development of a new plane. The Board was told that while customers' preference was an entirely new plane which would provide "superior

value,” the 737 re-design would “restore[] competitive advantage over [Airbus’s] NEO.”

134. The Board again discussed the re-design in late August 2011. The Board focused on how quickly and inexpensively the Company could develop the 737 MAX model to compete with Airbus’s A320neo. Minutes from the meeting reflect the Board asked questions about several topics—including engine options, program personnel, development schedule contingencies, customer contract provisions regarding performance and penalties. According to three people present at that meeting, no Board member asked about the safety implications of reconfiguring the 737 with larger engines.

135. The August 2011 Board meeting ended with a resolution that the Company would “launch a 737 aircraft incorporating new engine technology and such other modifications and upgrades as are deemed appropriate in light of prevailing market conditions.” The resolution delegated to McNerney all authority respecting the multi-year effort to approve the final specifications for the 737 MAX, and deliver and build the aircraft, without having to return to the Board.

136. Boeing announced the 737 MAX launch in an August 30, 2011 press release. Boeing intended to develop three models of 737 MAX airplane of varying sizes: the 737 MAX 7, MAX 8, and MAX 9.

137. Yet, Boeing was months behind Airbus in developing its next generation of aircraft. Playing catchup to Airbus resulted in Boeing, according to current and former employees, setting a “frenetic” pace for the 737 MAX program. Engineers were asked to submit technical drawings and design at double their normal pace. In the words of one engineer, “it was go, go, go.” Inevitably, the blueprints designers delivered to the technicians were sloppy and deficient of the intricate instructions normally necessary to ensure proper assembly.

138. As Boeing’s engineers began designing the plane, they were instructed to maintain “commonality”—an industry term that evaluates how similar one model is to its predecessor—with the existing 737 NG. Maintaining commonality was essential to expedite FAA certification. By developing the 737 MAX as a derivative plane, Boeing would only need FAA certification for those changes between the 737 NG and 737 MAX. In the words of Mike Renzelmann, a former Boeing engineer who worked on the 737 MAX’s flight controls, Boeing “wanted to A, save money and B, to minimize the certification and flight-test costs.”

B. From Inception, the 737 MAX Met the Board’s Business Objectives.

139. Once Boeing’s “commonality” approach was set in motion, orders for the 737 MAX flooded in. Four months after launch in 2011, the 737 MAX had

logged more than 1,000 orders and commitments from airlines and leasing customers worldwide.

140. The list price for a 737 MAX ranges from \$99.7 million to \$134.9 million, depending on size. By 2014, Boeing had cumulative orders in excess of 2,700 737 MAX airplanes from 57 customers. By the end of 2016, these figures had grown to over 4,300 orders from 92 customers. The 737 MAX had become the fastest-selling airplane in Boeing's history.

141. Boeing targeted emerging markets for 737 MAX sales. At the highest levels, the United States government assisted Boeing in landing international sales of its aircraft. Boeing is a staunch supporter of the U.S. Export-Import Bank, which provides financial incentives to foreign customers who buy American products, and Boeing lobbies the Bank to expand and extend loan guarantees and promote the Company in trade talks. The Board is frequently updated on government advocacy efforts in emerging markets on Boeing's behalf.

142. Other regions around the world take their safety cues from the FAA. As Forkner explained in a 2016 email: the "FAA is pretty powerful and most countries defer to what the FAA does[.]"

143. In 2017, Lion Air and Garuda Airlines both initially requested simulator training on their newly purchased 737 MAX airplanes. But, rather than

provide costly simulator training, Boeing employees emphasized that the “FAA, [European regulators], Transport Canada, China, Malaysia, and Argentina [sic] authorities have all accepted the [computer-based training] requirement.”

Simulator training was never required or provided to any airline in emerging markets or elsewhere. As discussed further below, Boeing pursued this cost-saving, revenue-enhancing strategy knowing that in many countries with expanding fleets of low-cost airlines, the quality of pilot training was not consistently as high as in the United States.

144. Boeing began fulfilling customer orders in May 2017, starting with the delivery to Malindo Air in Indonesia of seventy-four 737 MAX aircraft.

145. Competition with Airbus for new business in Southeast Asia in particular was fierce, but, by December 2017, Boeing had made 737 MAX sales to a number of airlines in the region, including Lion Air, Garuda Indonesia Airlines, Singapore Airlines, Malaysia Airlines, Thai Airways, Philippines Airlines, and Vietnam Airlines.

146. By 2018, the MAX 737 had contributed massively to Boeing’s revenues and profits. Approximately 60% of the Company’s record \$101.1 billion in annual revenue came from the Commercial Airplanes division. In 2018, approximately \$8 billion, or 80% of annual net earnings, came from the

Commercial Airplanes division. By the end of 2018, the value of Boeing’s total backlog of orders—a measure of financial health for an airplane manufacturer—had risen to \$490 billion, with the Commercial Airplanes division accounting for \$412 billion and nearly 5,900 jetliners. Of those, more than 4,000 were 737 MAX planes. Since its launch, the 737 MAX had received approximately 5,000 orders from more than 100 airlines and leasing customers worldwide.

147. The Company struggled with supply chain issues that challenged its ability to keep pace with investor and customer expectations, and meet production and delivery targets set by the Board. Deliveries averaged approximately 39 per month in July and August 2018, well below the stated 57 per month rate.

148. Boeing workers faced intense pressure to maintain production schedules and deliver the new 737 MAX plane to customers; one former Boeing manufacturing manager testified that it was a “factory in chaos.”

149. On August 27, 2018, McAllister gave a presentation to the Board about the 737 MAX. He described the plan for ramping up production from 31.5 planes per month in October to 57 per month in June 2019.

C. Beneath the Level of Board Oversight, Business Imperatives for the 737 MAX Presented Safety and Certification Problems.

150. Re-designing the 737 NG with new engines to develop the 737 MAX involved a “design change that [would] ripple through the airplane.” The 737

MAX would have larger engines than the 737 NG, necessitating that the engine be positioned differently on the airplane's wings. This shifted the 737 MAX's center of gravity and created a risk that, absent mitigating design changes, the 737 MAX might tilt too far upwards or "pitch up" during flight.

151. As early as 2012, Boeing's wind-tunnel tests on the 737 MAX revealed that the jet had a tendency to pitch up. Boeing failed in its initial attempts to resolve this engineering challenge with aerodynamic solutions—such as by adjusting the plane's shape by placing vortex generators or small metal vanes on the wings, or by altering the wings' shape.

152. Boeing's solution was MCAS, which counteracted the pitch-up problem by automatically swiveling up the leading edge of the plane's entire horizontal tail (known as the "horizontal stabilizer"), thereby causing the air flow to push the tail up and correspondingly push the nose of the plane down.

153. MCAS was originally designed "to address potentially unacceptable nose-up pitching moment at high angles of attack at high airspeeds."

As originally designed, MCAS required both a high angle of attack ("AOA") and a high G-force (the plane's acceleration in a vertical direction) in order to activate.

154. In 2014, Boeing submitted a System Safety Assessment to the FAA. The Safety System Assessment contained a failure analysis calculating the effect of

possible MCAS failures, including the inadvertent activation of MCAS for different lengths of time. The failure analysis did not consider the possibility that MCAS could trigger *repeatedly*, effectively giving the software unlimited authority over the plane. Based on the 2014 failure analysis, Boeing determined that MCAS was not a “safety-critical system.”

155. In the midst of flight testing in 2016, Boeing made substantial changes to MCAS to enable its activation at low speeds. MCAS could be automatically triggered simply by a high AOA. MCAS was also made much more powerful. Despite these significant changes, Boeing did not conduct a failure analysis of the revised MCAS for the FAA.

156. Boeing’s internal safety analyses of the new MCAS in 2016 revealed that if it took a pilot more than 10 seconds to identify and respond to the software’s activation, the result could be “catastrophic” (*i.e.*, the destruction of the entire airplane). Boeing summarized these findings in a document published in July 2018: “A typical reaction time was observed to be approximately 4 seconds. A slow reaction time scenario (>10 seconds) found the failure to be catastrophic. . . .” *Based upon the assumption that the pilot would react to counteract MCAS within four seconds*, Boeing’s 2016 internal safety assessment concluded that the likelihood of a “hazardous event” due to an MCAS failure was nearly

inconceivable. A December 2020 bipartisan Senate Report, released following an eight month investigation, concluded that despite numerous tests revealing that Boeing’s four-second reaction time assumption was a gross underestimate, Boeing nevertheless attempted “to cover up important information [during the recertification process] that may have contributed to the 737 MAX tragedies.”

157. The revised MCAS was susceptible to failure because its sole input, the AOA, came from a single sensor that gauges incoming airflow. (The plane had two such sensors, but only one fed into MCAS on any given flight.) If the operative AOA sensor determined that the airplane was pitching up at too steep an angle, it would automatically trigger MCAS even precipitated by a false reading from a single AOA sensor.

158. AOA sensors are external devices on the plane that are highly vulnerable to false readings or failure caused by general weather, lightning, freezing temperatures, software malfunctions, or birds. Between 2004 and 2019, failed AOA sensors were flagged to the FAA in more than 216 incident reports (including instances where planes had to make emergency landings as a result).

159. An engineering design with a “single point of failure”—here, a single AOA sensor—is a fundamental violation of engineering principles. Aircraft engineers and manufacturers typically build redundancies into their designs so that

one single error in a complex system does not cause total system failure. A 2011 FAA Advisory Circular states that “[h]azards identified and found to result from probable failures are not acceptable in multiengine airplanes . . . [i]n these situations, a design change may be required . . . such as increasing redundancy.”

160. Boeing’s own assessment that failure of MCAS was “hazardous” mandated that it build in redundancy and safeguard against a single point of failure. Pilots should never have been at the mercy of a single faulty AOA sensor indicating upward pitch, thereby triggering MCAS to automatically force the plane’s nose to pitch down. Indeed, a Boeing engineer in late 2015 queried: “[a]re we vulnerable to single AOA sensor failures with the MCAS implementation or is there some checking that occurs?”

161. Boeing rejected a 2013 proposal by engineer Curtis Ewbank and his team to implement a proposed safety feature used in the 787 Dreamliner, called synthetic airspeed, that would have detected a false AOA signal. Ewbank filed an ethics complaint shortly after the Ethiopian Airlines Crash stating that the proposal was blocked by Boeing managers because it would have entailed additional cost and pilot training.

1. **Boeing Concealed from the FAA AEG the Expanded Scope of MCAS In Order to Limit Required Pilot Training.**

162. FAA certification of an airplane requires two separate determinations made by distinct groups within the FAA, with different personnel and organizational structures: (i) whether the airplane meets airworthiness standards; and (ii) what level of pilot training is required to fly the airplane.

163. The FAA AEG assesses the minimum level of pilot training required for a pilot to fly an airplane by evaluating the similarity between the new and prior versions of the airplane. The minimum level of pilot training for the new airplane is known as “differences training.”

164. Boeing sought “Level B” training for the 737 MAX, which is significantly less expensive for airlines because it can be done on a tablet computer without flight simulator training. Required simulator training would foil two commercial objectives: it would defeat the economies inherent in commonality for airlines already flying the 737 NG; and make the 737 MAX less competitive with the Airbus 320 neo.

165. As noted above Forkner understood the importance of Level B training and he did not want to be blamed for the cost of losing that classification. He received a text message stating, “nothing can jepordize level b.” In another exchange, a Boeing marketing employee wrote that minimizing training

requirements “is a big part of the operating cost structure in our product marketing decks, and is at the heart of . . . \$\$\$ analyses.” Forkner reassured all those on the e-mail that the training “footprint will be less than 4 hours.”

166. Over a period of years, Boeing asserted that flight simulator training would not be necessary on the 737 MAX, because it was so similar to the 737 NG:

- In 2014, Boeing issued a press release stating that “Pilots already certified on the Next Generation 737 will not require a simulator course to transition to the 737 MAX.”
- In 2014, Forkner instructed Boeing employees to “flood [Southwest Airlines] with as much data as we can, showing the similarities [between the NG and the 737 MAX].”
- E-mails in 2014 between Forkner and another Boeing employee discussed the “pressure” to comply with a directive to limit 737 MAX training requirements to “Level B.”
- In 2015, Forkner exchanged e-mails with another Boeing employee stating that any risk associated with the limited training on the 737 MAX was one that “we must live with for [minimal training] course for NG to MAX.”
- In March 2017, Forkner wrote to “stress the importance of holding firm that there will not be any type of simulator training required to transition from NG to MAX. Boeing will not allow that to happen. We’ll go face to face with any regulator who tries to make that a requirement.”
- Rick Ludtke, a former Boeing engineer who was on the 737 MAX team, recalled that “[a]ny designs we created [for the 737 MAX] could not drive any new training that required a simulator.” Ludtke further stated, “[Boeing] was trying to avoid costs and trying to contain the level of change . . . [t]hey wanted the minimum change to simplify the training differences . . .”

167. On August 17, 2016, the FAA AEG issued a provisional report establishing “Level B” differences-training determination for the 737 MAX. The FAA told Boeing that “approval is contingent upon no significant aircraft design changes being incorporated into the MAX aircraft prior to FAA part 25 certification.” Forkner sent a triumphant email to Boeing employees proclaiming that the provisional determination “culminates more than 3 years of tireless and collaborative efforts across many business units” and 737 MAX program management “is VERY happy.”

168. As of August 2016, the FAA AEG was not aware, and had not been told by Boeing, that Boeing altered MCAS so that it activated at lower speeds.

169. In November 2016, Forkner communicated via text message with his colleague Patrick Gustavsson about his experience with MCAS in a flight simulator (the “Forkner Text Messages,” which are attached hereto as Exhibit A). The Forkner Text Messages reflect that, contrary to what Boeing had presented to the FAA AEG, Forkner experienced MCAS taking control at a lower speed than expected:

Forkner: MCAS is now active down to M[ach] .2
It’s running rampant in the sim on me
at least that’s what Vince thinks is happening

Gustavsson: Oh great, that means we have to update the speed trim description in vol 2

Forkner: so I basically lied to the regulators (unknowingly)

Gustavsson: it wasn't a lie, no one told us that was the case

170. Despite having ample opportunity to do so, no one at Boeing ever revealed this deception: as a result, during the certification process, the FAA AEG remained uninformed of the actual operation of MCAS. Moreover, Forkner continued to remind the FAA that it should not reference MCAS in its report because it was “outside the normal operating envelop.” Forkner explained:

[O]ne of the Program Directives we were given was to not create any differences . . . That is what we sold to the regulators who have already granted us the Level B differences determination. *To go back to them now, and tell them there is in fact a difference . . . would be a huge threat to that differences training determination.*

171. In July 2017, the FAA AEG published the final 737 MAX report providing for “Level B” differences training determination. Forkner emailed a Boeing colleague bragging that his “jedi mind tricks” had worked on the FAA.

2. Boeing Withheld Information About MCAS From Pilot Reference Manuals.

172. By convincing the FAA that MCAS did not need to be included in the manuals and documentation provided to airlines and flight crew, Boeing could avoid costly, albeit vital, simulator training. Boeing claimed that MCAS did not merit a detailed description because it was “completely transparent to the flight

crew and only operates WAY outside of the normal operating envelope.” The FAA AEG was never aware that Boeing was in the midst of expanding the scope of MCAS, as Boeing further maintained that MCAS did not even merit reference in 737 MAX pilot manuals.

173. No substantive description of MCAS is in any of the three important documents created by Boeing for pilots for every new aircraft model: (i) the Flight Crew Operations Manual (“FCOM”); (ii) the Quick Reference Handbook; and (iii) the Flight Crew Training Manual. The FCOM is the primary reference for pilots. The Quick Reference Handbook is a shorter emergency manual intended for use during abnormal flight situations. The Flight Crew Training Manual provides general recommendations on flying maneuvers and techniques.

174. In the 1,400 page FCOM, MCAS was originally listed only in the glossary of abbreviated terms. Subsequent versions of the FCOM removed all reference to MCAS, including in the glossary. Years later, in testimony before Congress, then-FAA Acting Administrator Elwell admitted, “I, at the beginning when I first heard of this, thought that the MCAS should have been more adequately explained in the ops manual and the flight manual, absolutely.” FAA Administrator Dickson testified before the Senate in June 2020: ““I strongly believe that [MCAS] should have been in the material, in the operations material

that was provided to the pilots. Anything that affects the flight control system of the airplane, the pilots should have. So, I think that I have concerns about how that was initially done.”

3. Boeing Failed To Tell the FAA Or 737 MAX Customers that the AOA Disagree Alert Was Inoperable.

175. Boeing concealed that a sensor—the “AOA disagree alert”—was inoperable on 737 MAX aircraft. This alert identifies any disagreement between an aircraft’s two AOA sensors and was a standard feature on the 737 NG.

176. In August 2017, Boeing learned that the AOA disagree alert was a non-functional display item in the 737 MAX cockpit. Due to a software failure, the alert was unable to sense disagreement or light up unless a customer purchased an optional “add-on” feature for \$80,000 called an “AOA indicator display.” At least 80% of the 737 MAX planes Boeing delivered—including the Lion Air and Ethiopian Airlines planes that crashed—did not have working AOA disagree alerts.

177. The inoperable AOA disagree alerts violated the March 2017 737 MAX’s “type certificate” that Boeing submitted to the FAA. A type certificate identifies the standard features of an aircraft and confirms its compliance with applicable airworthiness requirements. According to FAA Administrator Elwell, “once [the AOA disagree message] was made part of the approved type design, it

was required to be installed and functional *on all 737 MAX airplanes Boeing produced.*”

178. Boeing decided that the AOA disagree alert would only be repaired in a software update not scheduled to occur until 2020.

179. Boeing did not tell the FAA or its customers that the majority of its planes had inoperable AOA disagree alerts until after the Lion Air Crash. At that time, Mike Van de Ven, Chief Operating Officer of Southwest Airlines, a major Boeing customer, angrily stated in an email to Boeing that his request for the optional add-on should be “treat[ed ...] like a demand.” Van de Ven expressed shock that Southwest had been required “to buy safety warning information” (that is, the AOA indicator display) as an optional “add-on.” Boeing’s Chief Project Engineer for the 737 Program stated in an internal email that “if SWA wants that option we can give it to them. . . I don’t necessarily agree . . . that this is a safety warning feature.”

180. Even after the Ethiopian Airlines Crash, Boeing continued to insist that the AOA indicator display was not a “required” safety feature and that it was appropriate to offer it as an optional “add on.” In late March 2019, a Boeing employee watched Muilenburg’s internal video addressing the Ethiopian Airlines Crash and emailed Muilenburg to ask how Boeing could possibly emphasize safety

as its number one priority when “a system that would have warned the pilots of these two doomed aircraft that a sensor was malfunctioning was an \$80,000.00 option.”

V. **Muilenburg Launches a False Public Relations Campaign Following the Lion Air Crash.**

181. The commercial aviation industry is predicated on airplane safety. Commercial aviation crashes are exceedingly rare even as the number of scheduled flights has increased steadily since the early 2000s. By 2017, approximately 36.7 million commercial flights were scheduled annually. Between 2010 and 2017, there were three accidents worldwide involving commercial passenger airplanes with more than 150 fatalities. No such crashes occurred in 2015, 2016, or 2017.

182. Following the Lion Air Crash in October 2018, it was incumbent on Boeing’s fiduciaries to assess necessary steps so that Boeing was never again responsible for a large-scale fatality. Boeing’s directors and officers failed to do so. The Board did not demand from Muilenburg complete and accurate information about the safety of the 737 MAX fleet. Instead, it focused on public relations and lobbying. After the Lion Air Crash, the Board endorsed Muilenburg’s attack on accurate media coverage.

A. **Boeing Is Promptly Blamed For Safety Failures After the Lion Air Crash.**

183. On October 29, 2018, Lion Air Flight 610 departed Jakarta, Indonesia. The aircraft, a 737 MAX, had been in service for fewer than three months.

184. Thirty seconds after takeoff, the airplane's stick shaker³ began to rattle—an indication to pilots of a potential imminent stall. Minutes later, the airplane's nose was suddenly and repeatedly pushed downward by MCAS, which would disable for a few seconds, then re-activate. The pilots' request to return to Jakarta was granted. The plane never returned. Within 12 minutes of taking off, Lion Air Flight 610 crashed into the Java Sea, killing all 189 people onboard.

185. Satellite data showed the plane rising and falling repeatedly— more than 20 times—as the pilots struggled to wrest control back from the automated system. Data recovered from the plane's black box revealed that for nine minutes, while the pilots struggled to keep the plane's nose upright, the first officer flipped frantically through the Quick Reference Handbook (containing a checklist for abnormal flight events), in order to identify what was happening to the plane. But the handbook said nothing about MCAS. The pilots struggled to pull back on the yoke, which in prior 737 models would have permanently disabled any automated

³ A stick shaker is a mechanical device that is connected to the control wheel— called the yoke—of an aircraft, which notifies pilots of an imminent stall by vibrating rapidly and loudly.

flight control systems. But that could not disable MCAS, which continued to push the 737 MAX's nose downward until it crashed into the ocean.

186. Within days, Boeing concluded that MCAS was a cause of the crash and began working on a software fix. The Company's chief engineer testified to the House of Representatives in July 2019 that Boeing had "quickly identified that this MCAS activation could have been a scenario. . . . And once the flight data recorder came up [Boeing] started working on a [MCAS] software change immediately."

187. Meanwhile, the FAA conducted an internal safety analysis of the 737 MAX called a Transport Airplane Risk Assessment Methodology ("FAA Risk Assessment"). The FAA Risk Assessment concluded that there was an unacceptably high risk of catastrophic failure if the MCAS design was not changed. Specifically, the FAA estimated that the fleet of Boeing 737 MAX planes would average one fatal crash stemming from MCAS every *two to three years* if the software was not corrected. Notably, the FAA's analysis was based on the size of Boeing's existing 737 MAX fleet; it did not account for the exponentially increased risk when Boeing's nearly 5,000 backorders were delivered. Boeing was informed of the results of the FAA Risk Assessment, and

Boeing conducted its own risk assessment, which was consistent with the FAA's conclusions.⁴

188. On November 6, 2018, Boeing issued a Manual Bulletin stating that “[i]n the event of erroneous AOA sensor data, the pitch trim system can trim the stabilizer nose down in increments lasting up to 10 seconds.” The Manual Bulletin failed to identify the pitch trim system as MCAS.

189. On November 7, 2018, the FAA issued an Emergency Airworthiness Directive (“Emergency Directive”) identifying the potential danger presented by the 737 MAX flight control system and training manual. An Emergency Directive appears solely “when an unsafe condition exists that requires immediate action by an owner/operator.” In such cases, “the intent of an Emergency Directive is to rapidly correct an urgent safety of flight situation.” Emergency Directives are extremely rare.

190. The Emergency Directive confirmed that Boeing was aware of an unsafe condition that could cause a 737 MAX to crash into the ground: “an analysis performed by the manufacturer showing that if an erroneously high single angle of attack (AOA) sensor input is received by the flight control system, there is a potential for repeated nose-down trim commands of the horizontal stabilizer.”

⁴ MIT statistics professor Arnold Barnett later stated that the FAA analysis underestimated the 737 MAX's risk “by a factor of at least 24.”

The Emergency Directive warned that nose-down trim “could cause the flight crew to have difficulty controlling the airplane, and lead to excessive nose-down altitude, significant altitude loss, and possible impact with terrain.” The Emergency Directive acknowledged that “the unsafe condition described previously is likely to exist or develop in other products of the same type design.”

191. The FAA ordered that operators, within three days, “revise the airplane flight manual (“AFM”) to provide the flight crew horizontal stabilizer trim procedures to follow under certain conditions.” The relief directed by the FAA in the Emergency Directive was unusually mild. It did not refer to MCAS.

According to the *Wall Street Journal*, “When the FAA determines an aircraft poses an unacceptably high safety risk, it typically mandates targeted equipment changes, inspections or training to alleviate the hazard. It is unusual for the agency to conclude that reiterating cockpit emergency procedures or tweaking manuals will suffice.”

192. Individual pilots voiced safety concerns about the 737 MAX to the Aviation Safety Reporting System (“ASRS”), a federal database for anonymous, voluntary reports about aviation incidents. One report submitted on November 8, 2018 described the pilot’s reaction to learning about the existence of MCAS:

I think it is unconscionable that a manufacturer, the FAA, and the airlines would have pilots flying an airplane without adequately

training, or even providing available resources and sufficient documentation to understand the highly complex systems that differentiate this aircraft from prior models. The fact that this airplane requires such jury rigging to fly is a red flag. Now we know the systems employed are error prone—even if the pilots aren’t sure what those systems are, what redundancies are in place, and failure modes.

I am left to wonder: what else don’t I know? *The Flight Manual is inadequate and almost criminally insufficient. All airlines that operate the MAX must insist that Boeing incorporate ALL systems in their manuals.*

193. The same month, another Boeing 737 MAX pilot reported that the aircraft had pitched nose down after the autopilot was engaged on departure. The Ground Proximity Warning System—the system designed to alert pilots if their aircraft is in immediate danger of flying into the ground or an obstacle—sounded, warning the pilots with the alert, “don’t sink, don’t sink”—just as it had before the Lion Air Crash. The captain was able to avoid disaster by immediately disconnecting the autopilot and pitching the aircraft into a climb. The first officer wrote that he could not “think of any reason the aircraft would pitch nose down so aggressively.” Between November 2018 and February 2019, at least five complaints from pilots concerning the 737 MAX aircraft were recorded through the ASRS that described similar flight control issues and unanticipated dives.

194. The three largest pilots’ unions reacted to Boeing’s failure to disclose the import of this novel software. On November 10, 2018, Captain Mike Michaelis, chairman of the safety committee of the Allied Pilots Association at

American Airlines, sent out a message to pilots regarding MCAS. “This is the first description you, as 737 pilots, have seen,” the message said. “It is not in the American Airlines 737 Flight Manual ... nor is there a description in the Boeing FCOM. It will be soon.” The same day, Boeing’s largest customer, Southwest Airlines wrote a letter to its pilots acknowledging that there was no specific reference to MCAS in the FCOM.

195. On November 12, 2018, the *Wall Street Journal* published an article entitled “Boeing Withheld Information on 737 Model, According to Safety Experts and Others” (attached hereto as Exhibit D). The *Wall Street Journal* article noted that the focus of U.S. and Indonesian crash investigators had shifted to the way in which “the MAX 8’s automated flight-control systems interact with each other, and how rigorously the FAA and Boeing analyzed potential hazards in the event some of them malfunction and feed incorrect or unreliable data to the plane’s computers.” Citing industry and government officials, the article revealed that “Boeing is working on a software fix.”

196. The *Wall Street Journal* article described MCAS as a “new stall-prevention system that may have contributed to [the] crash of Lion Air flight 610,” which, in some instances, could push the nose down “unexpectedly and so strongly that flight crews can’t pull it back up,” causing a steep dive or crash. According to

the article, erroneous data from sensors outside the plane “may have activated the system even though the nose wasn’t rising.”

197. More critical still, the *Wall Street Journal* revealed that Boeing had purposely declined to tell pilots and airlines about MCAS because, as a “high-ranking Boeing official” explained, the Company was concerned “about inundating average pilots with too much information—and significantly more technical data—than they needed or could digest.” The article explained that this decision was tied to Boeing’s 737 MAX marketing, which represented to airline customers that their pilots could forego additional simulator training beyond that already required for the NG. Further, according to an FAA manager, the new flight control systems “weren’t highlighted in any training materials or during lengthy discussions between carriers and regulators about phasing in the latest 737 derivatives.” The article noted that “some FAA managers and industry officials aren’t satisfied with what they contend is Boeing’s belated candor.”

198. Finally, the *Wall Street Journal* article explained that pilots and their unions were dismayed to learn the 737 MAX had a flight control system that Boeing had never disclosed. A pilots’ union representative for American Airlines, one of Boeing’s biggest customers, was quoted as saying “[i]t’s pretty asinine for them to put a system on an airplane and not tell pilots who are operating the

airplane, especially when it deals with flight controls,” and questioned why pilots were not trained on it. Further, a representative from the Southwest Airlines Pilots Association was “pissed that Boeing didn’t tell the companies [about MCAS] and the pilots didn’t get notice obviously.” As a consequence of Boeing hiding MCAS, pilots “typically weren’t prepared to cope with the possible risks.”

199. On November 27, 2018, the Allied Pilots Association met with representatives from Boeing at the union’s headquarters. One pilot defended the Lion Air pilots: “These guys didn’t even know the damn system was on the airplane, nor did anybody else.” Another pilot said that the system should have been explained in the aircraft’s training manual: “I would think that there would be a priority of putting explanations of things that could kill you.”

200. At the meeting, for the first time, Boeing publicly confirmed that it was making changes to MCAS but would not “rush” the process.

201. Boeing Vice President Mike Sinnott dismissed the pilots’ concerns, saying that Boeing felt pilots did not need to know more about MCAS, given how unlikely it was considered to misfire: “I don’t know that understanding this system would’ve changed the outcome on this. In a million miles, you’re going to maybe fly this airplane, maybe once you’re going to see this, ever. So we try not to

overload the crews with information that's unnecessary so they actually know the information we believe is important.”

202. Sinnett also stated that Boeing was “working with the FAA right now to try to figure out what software changes we might make to eliminate the failure conditions that we experienced at Lion Air.” When asked by the Allied Pilots Association spokesperson whether Boeing felt “comfortable that the situation is under control, today, before any software fixes are implemented,” Sinnett responded: “Absolutely.”

203. At the same meeting, Sinnett rejected the notion that the AOA sensors represented an unacceptable “single point of failure,” claiming that “it is not considered by design or certification a single point,” “[b]ecause the function and the trained pilot work side by side and are part of the system.”

B. Muilenburg Misleads About Accurate Press Coverage Respecting the 737 MAX.

204. Given that the Lion Air Crash was a mass fatality plausibly attributable to design attributes of the 737 MAX, it was essential that the Board realize that it had been effectively flying blind. The Board lacked a Board-level information reporting system, and a future crash posed an existential danger to the 737 MAX, the Commercial Aircraft division, and Boeing itself.

205. The Board's only conduit of information about aircraft safety was Muilenburg, a CEO with an intense commercial as well as personal interest in selling as many aircraft as possible (and maximizing the value of his equity-based compensation). The Board needed to make a course correction and implement tools by which the Board could properly oversee mission-critical risks respecting the safety of its aircraft.

206. That is not what the Board did in the aftermath of the Lion Air crash. Muilenburg and the Board treated investigative reporting into Boeing by major news organizations as a problem of public relations, investor relations, customer relations, and government relations. The Board did not look inward and investigate. It did not create tools by which the directors could evaluate what within Boeing needed to be fixed. The Board did not even demand that Muilenburg deliver factual presentations about the charges being made about the Company and its planes. The Board's materials and communications in the aftermath of the Lion Air Crash do not reflect any analysis of safety-related complaints respecting the 737 MAX.

207. Muilenburg took advantage of the Board's failure to implement information-reporting systems. He deflected and denied wrongdoing, and proclaimed the airplane was safe. He misled the Board in the same way Boeing

mistreated regulators, airline customers, pilots, and the public at large. The Board, in turn, consciously disregarded Muilenburg's failure to provide candid, factual, substantive reports about a mission-critical, life-and-death issue.

208. Muilenburg's first written correspondence with the Board in the wake of the Lion Air crash was on the evening of November 5, 2018, a week after the crash. His email, which was also sent to Luttig, Smith, and McAllister, makes no mention of measures to improve the safety of the 737 MAX, increase Board oversight respecting safety, or otherwise ensure that a 737 MAX crash would not happen again. Nor does Muilenburg mention the devastating conclusion of the FAA's Risk Assessment that there was an unacceptably high risk of catastrophic failure if MCAS was not changed.

209. Instead, Muilenburg's email of November 5 attempts to discredit recent media reports that design issues with the 737 MAX, specifically MCAS, were likely to blame for the crash. "[The Indonesian National Transportation Safety Committee] publicly said today that the airspeed indicator on the airplane that crashed was damaged during the last four flights of the airplane," he wrote. He concluded, "We believe the 737 MAX fleet is safe."

210. On November 8, Muilenburg sent another letter to the Board that briefly addressed the Lion Air investigation. He advised that Boeing had published

a Manual Bulletin and that the FAA had issued “a fully expected FAA Emergency Airworthiness Directive,” which he characterized as “reinforc[ing] existing flight crew procedures to address this condition.” In fact, the Manual Bulletin and Emergency Directive required pilots to learn an unfamiliar procedure to respond to non-intuitive circumstances: the plane automatically and repeatedly engaging an automated system while in manual flight mode.

211. Muilenburg’s priority was the continued manufacture and sale of the 737 MAX. In response to news of the FAA’s Emergency Directive, Muilenburg emailed Smith warning of the possible hit to productivity of the additional safety measure implemented by the FAA: “[w]e need to be careful that the [airplane flight manual] doesn’t turn into a compliance item that restricts near-term deliveries.”

212. On November 13, 2018, director Arthur Collins forwarded Muilenburg a news summary from the *Wall Street Journal* with a short cover email: “I am sure you have already read point #2 and will brief the [B]oard on this topic.” “Point #2” was the November 12 *Wall Street Journal* article discussed above.

213. On November 13, Muilenburg sent an update to the Board in which he attacked the November 12 *Wall Street Journal* as “categorically false.” (Exhibit D

(emphasis in original.) He defended the FCOM by saying it “does reference the ‘trim down’ behavior that pilots would experience in the rare event that the airplane reaches a high angle of attack (AOA) approaching stall,” and that “the appropriate response to uncommanded trim, regardless of cause or 737 model, is contained in existing flight crew procedures.” (Boeing now admits in the DOJ Agreement that the FCOM was “materially false, inaccurate, and incomplete.” (Exhibit B).)

214. The next day, Muilenburg wrote an email to Duberstein: “Ken, Closing the loop – I talked with Dave [Calhoun] after we talked yesterday. He suggested that my note to the Board focus solely on the Lion Air matter given the importance and visibility” Duberstein replied: “Press is terrible. Very tough. Lots of negative chatter I’m picking up. Not pleasant. We need to address more aggressively concerns merging re 737 line, deliveries, and Lion Air.” Muilenburg agreed and discussed a public relations, investor relations, and lobbying campaign, which involved claiming that the pilot union cared only about “more pay”:

FAA came out with a *helpful* public statement today clarifying they are not doing a separate ‘probe.’ We also released a more detailed backgrounder this morning and are doing individual media target engagements today to get the facts and truth out. Also working airline operations leaders to get messages out and *counter pilot union comments (who are motivated to get separate type rating for MAX – equals more pay)*. Tim [Keating, Executive Vice President of Government Operations] engaged on political side too. In parallel,

doubling down with media and investors on 737 production health – helpful note from UBS published last night. On it, and working all angles.

Muilenburg’s email exchange with Duberstein is attached hereto as Exhibit E.

215. In an interview televised on November 16, 2018, Muilenburg again insisted that MCAS was “part of the training manual[.] . . . It’s an existing procedure so the [FCOM Bulletin] we put out . . . pointed to that existing flight procedure.”

216. On November 16, the *New York Times* published an article entitled “What the Lion Air Pilots May Have Needed to do To Avoid a Crash” that discussed how MCAS may have caused the crash. Muilenburg sent an email to senior vice president of Communications Toulouse and his chief of staff Schmidt stating, “[a]nother one full of errors and/or misleading descriptions.” Schmidt then stated, “Can’t wait for the gloves to come off,” to which Muilenburg responded, “Can’t wait either -- not too much longer until that happens.”

217. The following day, November 17, 2018, Boeing executives, including Muilenburg, Smith, McAllister, Hyslop, and Luttig, discussed a *Bloomberg* article about Boeing’s efforts to assuage customer concerns about MCAS in the wake of the Lion Air Crash. Muilenburg commented that the article was “filled with

misleading statements and inaccuracies – implying that we hid MCAS from operators and that procedures were not covered in training/manuals.”

218. On November 18, 2018, Muilenburg sent another letter to the Board. He informed the Board that pilot unions from two of Boeing’s biggest customers stated that they were not adequately trained on the 737 MAX:

First, on Lion Air, since my note on Tuesday we’ve seen a steady drumbeat of media coverage—and continued speculation—on what may have caused the accident. Various associations and unions representing pilots from American and Southwest airlines have jumped into the conversation, suggesting they didn’t receive sufficient information on the 737 MAX flight control system. Breaking ranks, United Airlines pilot union leadership sided with Boeing, suggesting pilots are adequately trained through existing procedures and that it’s premature to draw conclusions about what occurred.

219. Muilenburg assumed the same defiant posture in a November 19, 2018 internal message to Boeing employees. “You may have seen media reports that we intentionally withheld information about airplane functionality from our customers. That’s simply untrue,” he wrote. “The relevant function is described in the Flight Crew Operations Manual and we routinely engage with our customers about how to operate our airplanes safely.”

220. Muilenburg reiterated his strong displeasure with media coverage in a November 20, 2018, email to Boeing executives, including Smith, Luttig, McAllister, and Hyslop. He complained that Boeing was being “pounded in the press and market,” and laid the blame on “the media” for “trying to create news

and controversy, and drive wedges between us and our primary customers,” and “employees and/or third parties who feel a need to leak partial and/or inaccurate data, make uninformed and misleading claims, and further stir the pot.”

221. Muilenburg noted that the Boeing team “can and must do better”—not to understand or address the design deficiencies that caused the crash, but to “improve our customer communications and alignment,” with the goal of getting Boeing’s customers “on our side in public.” Muilenburg also specified that he included “regulators” in his definition of Boeing customers that the team should push to take Boeing’s side in public.

222. Muilenburg denied any safety problem with the 737 MAX:

With all the negative coverage, you’d think there is a problem with the MAX – yet every customer around the world continues full operations of the MAX, and they are doing it safely. That’s the truth. We need our story to be told.

223. Three days later, on November 21, 2018, Muilenburg emailed the Board to inform them about a Board call that he, Luttig, and Smith would be hosting to provide an update on the Lion Air Crash. The call was scheduled for Friday, November 23. Muilenburg noted that the call was “optional” in light of the Thanksgiving holiday weekend.

224. The call went forward as scheduled on November 23, 2018. Talking points for the call circulated among Muilenburg and other executives expressed

skepticism about media accounts of MCAS’s role in the crash: “[o]f course, that hasn’t stopped people from commenting freely, including customers, pilot unions, media, and aerospace industry punditry.” The talking points stated that “the function performed by MCAS”—the “trim down” behavior that Muilenburg had described in his November 14 letter—was referenced in the Flight Crew Operations Manual.

225. On November 28, 2018, Muilenburg sent a letter to the Board in response to release of the preliminary report by Indonesia’s National Transportation Safety Committee. The report assigned no blame for the Lion Air crash. Nonetheless, and notwithstanding the wide acknowledgement within the media and elsewhere regarding the role MCAS had played, Muilenburg blamed the Lion Air pilots and maintenance crews:

The report does . . . clearly suggest that the *investigators are focusing on Lion Air’s maintenance* in general and specifically on the Flight 610 aircraft. This additional scrutiny applies to the days leading up to the accident and *on the pilots’ handling of the aircraft* of the incident flight as compared to other pilots’ actions when the plane experienced similar issues on previous flights.

226. Muilenburg’s letter to the Board emphasized that Boeing’s external statement was “showing up in the initial media coverage, which has focused largely on Lion Air’s operations, maintenance practices and decision to fly with malfunctioning angle of attack sensors.” He acknowledged that “[o]ther media

outlets continue to focus on airplane systems, such as MCAS, the role of increased automation in modern commercial aircraft, and the frequency and type of communications we've had with customers about the 737 MAX and its differences from the NG.”

227. On December 6, 2018, Toulouse circulated an update on Boeing's press coverage to Muilenburg and other Boeing executives, including McAllister, Hyslop, Luttig, and Smith, which included two stories by the *Wall Street Journal*: one covering MCAS's role in the Lion Air Crash and the second reporting on Boeing's public relations challenges stemming from the crash. Muilenburg told Toulouse to “[k]eep pushing back on the WSJ MCAS article” and insisted that “*the only 'engineering and PR problem' we have is the pseudo problem fabricated by the WSJ!*”

228. On December 13, 2018, Muilenburg sent the Board a business summary and competitor dashboard for the month of December. In it, he briefly updated the Board again about the status of the Lion Air investigation, noting that Boeing was providing technical assistance to regulators, and the Company's media engagement strategy to express “continued confidence in the 737 MAX.” He also shared that delivery in November of sixty-one 737 MAX aircraft met or exceeded production targets.

C. The Board Supports Muilenburg’s Assurances Without Investigation.

229. Following the Lion Air Crash, the Board did not take any steps to investigate the safety of MCAS. The Board chose instead to support Muilenburg’s attacks on accurate press reports.

230. On December 16 and 17, 2018, the Board held its first regularly scheduled meeting after the Lion Air Crash. The Board materials reflect no substantive discussion of product safety issues, MCAS, or the AOA sensors—despite heavy media coverage of the issues. In fact, during the open Board session—including a presentation by McAllister concerning the 737 MAX—there is no recorded mention of the Lion Air Crash or MCAS.

231. The sole topic of discussion with respect to the 737 MAX was immediate restoration of profitability and efficiency in light of longstanding supply chain issues. The Board minutes note that: “Kevin McAllister discussed the state of the production recovery, focusing on the factory, supply chain, and engines. He concluded by discussing readiness for the next potential rate increase.” The presentation for the Board’s Executive Session on December 16, 2018 lists the “Lion Air incident” as a “Hot Topic.”

232. The Audit Committee materials from the December 2018 meeting do not reflect any discussion of the Lion Air Crash. The Audit Committee “Watch

Items” discuss the plan to “further increase” the 737 MAX production rate “to 57 per month in 2019,” and the program’s “progress working through supply chain and factory disruption affecting MAX deliveries.” It reflects no discussion of the recent mass-fatality crash of a Boeing aircraft, even though it mentions potential losses due to termination of a satellite contract, and the effect of the Woolsey fire in Southern California on “remediation and storm water management systems” at Boeing’s Santa Susana Field Laboratory site.

233. On January 16, 2019, Muilenburg sent his monthly business summary and competitor dashboard to the Board. He briefly updated the Board on the Lion Air accident investigation. For the first time, he acknowledged to the Board that Boeing had been working on an MCAS update: “While the investigation proceeds with our full support, we’re also exploring potential 737 MAX software enhancements that, if made, will further improve the safety of the systems.” Muilenburg also reiterated his confidence in the 737 MAX: “airlines around the world continue to operate the MAX safely while others such as flyadeal, Green Africa Airways, and United made significant new orders and commitments, expressing strong confidence in the airplane.”

234. On February 13, 2019, Muilenburg sent the Board the February business summary and competitor dashboard. In it, he provided a brief summary

about the MCAS fix, described euphemistically as a “software enhancement”:
“we’ll continue to work closely and methodically with the [FAA] on a 737 MAX software enhancement that, when implemented, will further improve system safety. Despite recent media speculation about the software update and its timing, nothing official has been decided or announced.”

235. By January 2019, the DOJ had opened a criminal investigation into dealings between Boeing and the FAA over the certification of the 737 MAX. In February 2019, in connection with that criminal investigation, Boeing turned over to the DOJ the Forkner Text Messages. Muilenburg was made aware in January 2019 of the content of the Forkner Text Messages.

236. On February 20, 2019, Luttig provided a report to the Audit Committee on the Lion Air Crash, termed the “Lion Air Accident.” The document as produced to Co-Lead Plaintiffs is entirely redacted.

237. The next Board meeting was held on February 24-25, 2019. The Lion Air Crash, MCAS, and safety of the 737 MAX were not discussed in the open session of the Board meeting. In the Executive Session, McAllister discussed factory production recovery and a potential “rate increase” for production of the 737 MAX. Muilenburg gave a presentation on the Lion Air incident in general, the

market reaction, and maintaining productivity. There was no mention of product safety or MCAS. No whistleblower concerns were mentioned.

238. On February 25, 2019, an addendum was issued to the meeting minutes summarizing a legal update given by Luttig. Luttig's legal update is entirely redacted. The Board "decided to delay any investigation until the conclusion of the regulatory investigations or until such time as the Board determines that an internal investigation would be appropriate."

239. The Board's decision to delay any internal investigation is consistent with the finding in the DOJ Agreement that Boeing's cooperation with DOJ "was delayed and only began after the first six months of the Fraud Section's investigation, during which time the Company's response frustrated the Fraud Section's investigation[.]" As discussed below, Muilenburg and the Board adopted a purely defensive posture denying the existence of any corporate practice worth remediating or acknowledging as problematic until after another MCAS-caused mass fatality and the FAA grounding of the 737 MAX.

VI. Muilenburg Lobbies Then-President Trump and the FAA While the Board Remains Focused on Public Relations.

240. On March 10, 2019, Ethiopian Airlines Flight ET 302 took off from Addis Ababa Bole International Airport. One minute into the flight the captain reported that the crew was having flight-control problems.

241. Throughout the chaos of the short and fatal flight, MCAS was activated at least four times due to faulty readings from one of the plane's AOA sensors, repeatedly pushing the plane downward and thwarting successive efforts by the pilots to regain control of the plane. At its first activation, MCAS pushed the nose of the airplane down for nine seconds. The plane descended slightly while audible warnings — “Don't Sink” —sounded in the cockpit. The pilots fought to turn the nose of the plane up, and briefly they were able to resume climbing, but MCAS again pushed the nose down.

242. The pilots followed the emergency procedures recommended by Boeing, by flipping a pair of cutoff switches that disabled the electric motor moving the horizontal stabilizer. But, having deactivated the electric motor, the pilots could not manually turn the stabilizer trim wheel to adjust the horizontal stabilizer to its proper position. After turning the electric motor back on, MCAS once again automatically pushed the plane's nose down, ultimately pushing the plane into a nosedive. Less than a minute later, the cockpit voice recording ended and the plane crashed, killing all 157 passengers and crew on board, six minutes after taking off.

243. Later that day, Muilenburg sent the Board a brief letter regarding the Ethiopian Airlines Crash and Boeing's official response statement. Toulouse sent

Muilenburg a draft all-employee email for his review. Muilenburg's response was to insist that the 737 MAX was safe and to deny that the two crashes were related:

Anne, I think this note is solid, but it lacks a statement about our confidence in the fundamental safety of the MAX I would like to add a specific statement regarding the MAX focused on this fundamental safety and confidence point. I also think we need to be stronger regarding the Lion Air point e.g., any speculation attempting to link the two accidents is not supported by facts. This goes back to our discussion last night on answering two basic questions: *is the MAX safe? And was MCAS involved? We need to make a strong statement on the first, and be clear that there are no supporting facts on the second.*

244. Multiple foreign aviation regulators (including those in China and Indonesia) immediately ordered the grounding of 737 MAX planes. By the next day, March 11, one-third of the world's fleet of in-service 737 MAX aircraft had been grounded, including by Ethiopian Airlines, Aerolineas Argentinas, Cayman Airways, Comair, Eastar Jet, Aeromexico, MIAT Mongolian Airlines, Gol Transportes Aéreos, and Royal Air Maroc. Several United States Senators called for the 737 MAX to be grounded by the FAA.

245. Muilenburg deployed Boeing's immense influence with the FAA to defer action by the regulator in the wake of the second crash. On March 11, 2019, Boeing officials met with Daniel Elwell, acting administrator and senior executive of the FAA, "to discuss the situation and reinforce our confidence in the 737 MAX." Muilenburg sent the Board an email later that day regarding Boeing's

damage control of bad publicity. Muilenburg described Boeing's outreach to investors, airlines, government officials and regulators, and the media.

Muilenburg's focus remained on delivering the 737 MAX to customers and meeting orders. He stated, "[p]aramount among our priorities is continuing to deliver on our commitment to get airplanes to our customers on time and with superior quality."

246. As a result, the FAA did not immediately ground the 737 MAX. Instead, on March 11, 2019, the FAA released a statement noting its plan to issue a "Continued Airworthiness Notification to the International Community" for Boeing 737 MAX operators. It stated: "External reports are drawing similarities between this accident and the Lion Air Flight 610 accident on October 29, 2018. However, this investigation has just begun and to date we have not been provided data to draw any conclusions or take any actions." The FAA also acknowledged that it had been working with Boeing to complete "flight control system enhancements" related to MCAS since the Lion Air Crash and anticipated mandating the design changes by April 2019.

247. Boeing contemporaneously issued "A Statement on 737 MAX Software Enhancement," claiming that "[s]afety is a core value for everyone at Boeing and the safety of our airplanes, our customers' passengers and their crews

is always our top priority.” It also said that “MCAS does not control the airplane in normal flight; it improves the behavior of the airplane in a non-normal part of the operating envelope.” Boeing claimed that an MCAS fix was something that Boeing had been working on “[f]or the past several months and in the aftermath of the Lion Air [Crash].”

248. Boeing’s March 11, 2019 statement questioned the capabilities of the Ethiopian Airlines pilots by claiming that all pilots needed to do was follow the flight crew manual:

Boeing’s 737 MAX Flight Crew Operations Manual (FCOM) already outlines an existing procedure to safely handle the unlikely event of erroneous data coming from an angle of attack (AOA) sensor. *The pilot will always be able to override the flight control law using electric trim or manual trim.* In addition, it can be controlled through the use of the existing runway stabilizer procedure.

Boeing concluded the note by stating, “It is still early in the investigation, as we seek to understand the cause of the accident.”

249. 737 MAX groundings continued: by March 12, regulators in Singapore, India, Turkey, Australia, and Malaysia, among others, issued directives to ground the 737 MAX. Other jurisdictions, such as the United Kingdom, banned the 737 MAX from their airspace altogether. The European Union Aviation Safety Agency announced the suspension of all 737 MAX flights in Europe, publishing a Safety Directive stating that the ban was imposed due to, among other things,

“similarities with the Lion Air accident data” and the “unusual scenario of a ‘young’ aircraft experiencing 2 fatal accidents in less than 6 months.”

250. By March 12, Boeing and the FAA faced tremendous bipartisan pressure to ground the 737 MAX. On March 12, the Association of Flight Attendants—which represents nearly 50,000 flight attendants at 20 airlines—issued a statement calling on the FAA to ground the 737 MAX fleet “until FAA-identified fixes to the plane can be installed, communicated, and confirmed.” The same day, the FAA issued an advisory notice mandating that Boeing implement design changes to the 737 MAX by April 2019.

251. On March 12, Muilenburg spoke to President Trump, assured him of the safety of the 737 MAX, and implored him that it not be grounded in the United States. Later on March 12, FAA officials reiterated their previously expressed position: domestic flights of the 737 MAX would continue.

252. Director Liddy expressed support for Muilenburg: “I, for one, really appreciate the strong leadership you’re demonstrating in a very challenging situation. Your leadership will prevail.”

253. On March 13, 2019, the FAA received new satellite data directly implicating MCAS in the Ethiopian Airlines Crash. The FAA announced its revised decision to ground all 737 aircraft. The FAA’s initial findings indicated

that the Ethiopian Airlines plane had experienced the same pattern of repeated, steep dives and climbs that had preceded the Lion Air Crash.

254. The FAA was the final major aviation regulator to ground the 737 MAX. In total, 387 planes were grounded.

255. Later that day, Muilenburg sent a communication to the Board that focused on how Boeing had successfully beaten the FAA to get its own messaging out about the grounding before the FAA released its own statement: “I spoke with President Trump before his press conference and also talked with U.S. Secretary of Transportation Elaine Chao and Federal Aviation Administration (FAA) leadership. . . . With this coordination, we were able to follow President Trump’s announcement with our own message ahead of the FAA’s statement.”

256. Later that evening of March 13, Muilenburg sent the Board the monthly business update. Muilenburg stated: “safety . . . is our top priority. That’s why I’ve added safety metrics to our monthly report”

257. On March 14, 2019, Muilenburg’s Chief of Staff Schmidt wrote him a note, cautioning him not to “drink [Boeing’s] own bath water” and to try to look at the safety problems objectively going forward. She observed that “the 737 reputation, and thus Boeing, has been severely hit if not destroyed at this point when looked at from a flying public—the passengers and voters—point of view,”

and encouraged Muilenburg to “start the journey to rebuilding our reputation— which we will and have done before with real data and not based on our tendency to want to only see the good.”

258. Over the course of the next six weeks, Muilenburg’s communications to the Board centered on the importance of bringing the 737 MAX back into service:

- On March 17, 2019, Muilenburg stated that the Company was working on new computer-based training materials for pilots. Muilenburg flagged unflattering press in the *New York Times*, *Seattle Times*, and *Wall Street Journal*.
- On March 19, 2019, Muilenburg sent a letter to the Board stating that the Company’s “computer-based training could be approved as early as today.”
- On March 20, 2019, Muilenburg’s letter to the Board stated that the U.S. Secretary of Transportation requested a formal audit of the certification process for the 737 MAX.
- On March 22, 2019, Muilenburg’s letter to the Board stated that Boeing “provided a detailed description of the planned MCAS software update and revised training” to the FAA.

259. On March 21, 2019, Giambastiani emailed Muilenburg to direct him to an article from *Aviation Week* and emphasized a comment suggesting the pilots were at fault for the two crashes: “More importantly for the pilot . . . FLY THE PLANE.”

260. On March 26, 2019, Duberstein emailed Muilenburg to inquire about the reputational impact of an emergency landing of a Southwest 737 MAX due to engine problems. Duberstein complained that the report “Led the network news. Another reputational hit at us and no comment from us.” Muilenburg replied: “Not happy with the reputational hit either.”

261. A preliminary report on the Ethiopian Airlines Crash, released April 4, 2019, cited MCAS as a contributing cause for the accident, combined with the fact that pilots could not adjust the stabilizer trim by hand. While there was an electronic system to help turn the trim wheel, that system was disabled by the same switch that disabled MCAS.

262. That same day, Boeing issued a press release from Muilenburg addressing the preliminary report, acknowledging that “in both flights the Maneuvering Characteristics Augmentation System, known as MCAS, activated in response to erroneous angle of attack information,” but otherwise insisting that

“most accidents are caused by a chain of events” and that was the case for the two crashes. The press release was sent to the full Board before it went out.

VII. Calhoun Embarks on a False Public Relations Campaign to “Position” Perceptions of the Board’s Conduct.

263. In early May 2019, then-Lead Director Calhoun did a series of interviews with the *New York Times*, *Washington Post*, and *Financial Times*. The stated objective of the interviews, according to an internal Boeing document, was to “Position the Boeing Board of Directors as an independent body that has exercised appropriate oversight.” Calhoun provided little truthful information to the media in support of that positioning.

264. Speaking to the *Washington Post*, Calhoun argued that safety oversight consisted of the Board keeping track of the FAA certification process:

Do we make sure that the rigor around those [certification] processes are good and that they are reported to us step by step? Of course we do. Do we ask questions about what the difficult spots are in the certification process? Of course we do. Do we go down to the test site and watch the monitors to find out whether they’re working accurately? No, we don’t. What you might call safety and everyone would like to label that, the certification process in and of itself and the review of those Cert milestones with us is safety. That’s what it is. The whole environment that gets attached to it is just that.

265. The Board had not actually probed “difficult spots ... in the certification process.” The Board minutes do not reflect any such probing questions.

266. Calhoun falsely insisted that the Board’s decision to re-design the 737 in 2011 had not reflected director concern about “competitive pressure” with Airbus:

So might there have been a discussion or a deliberation of somebody asked a question about should we at this time do a clean sheet of paper on narrow body? Maybe, *but not in the context of catching up to somebody*. We’ve been in the lead for quite some time and we believe we’re going to stay in the lead. . . . So I don’t think I’m rewriting history but I think those perspectives just might be.

In fact, Board materials show that the primary consideration favoring a 737 re-engine was that it would “restore[] competitive advantage over [Airbus’s] NEO.” Albaugh’s June 2011 presentation to the Board stated that Airbus “has made their first move,” and that the “NEO significantly enhances Airbus’ competitive position.”

267. The August 2011 Board minutes describe the “strategy and objectives associated with a re-designed 737 airplane, including increasing customer value, maintaining market share and a competitive advantage over the Airbus 320neo, reducing risk and enabling wide body product investment.”

268. In addressing the 737 MAX crashes during the interviews, Calhoun misrepresented the timeline and the Board’s level of engagement.

269. He told the *New York Times* that the Board was “notified immediately, as a board broadly,” when the Lion Air crash happened. When asked by the

Washington Post how soon after the Lion Air Crash the Board met to discuss the crash, Calhoun claimed it was “very, very quickly.” He also admitted that the Board learned about MCAS—and its role in the crash—not long after the Lion Air Crash, as the preliminary findings of the crash began to be released. He told the *New York Times* that “it was fairly quick that I think we knew that MCAS was involved or had been activated in the crash.”

270. Internal communications reflect the first written communication to the Board from Muilenburg was not until November 5, 2018, a week after the crash. The Board met for the first time by telephone on an “optional” Board call nearly a month after the crash, on November 23, 2018. Its first formal meeting was not until its regularly scheduled meeting in mid-December 2018, at which the Board did not discuss product safety issues, MCAS, or the Lion Air Crash.

271. Calhoun misrepresented that the Board determined after the Lion Air Crash to keep the 737 MAX in the air. He told the *Washington Post* that he did not “regret that judgment” to keep the plane in the air after the Lion Air Crash, saying: “It looked like an anomaly.” He told the *Financial Times* that the Board engaged in a “deliberative process” with the CEO in the wake of the Lion Air Crash to consider whether to ground the plane. According to Calhoun, the Board

[D]etermined [the crash] was an anomaly and that we could go to work on improving the system. But in light of those circumstances, it was not likely

to happen again. And therefore, *you make a decision*, Okay. We're not going to recommend to anybody that the fleet be grounded. . . . So, yeah, *we looked over that many times*.

272. No Board minutes, agendas, or emails reflect that the Board and Muilenburg ever considered, deliberated over, or came to a “decision” about whether it was appropriate to ground the plane in the wake of the Lion Air Crash. No Board communication or email discusses it. No Board minutes or agendas between November 2018 and March 2019 reference a discussion about grounding the 737 MAX.

273. Calhoun untruthfully described the Board’s concern about public relations. He told the *Financial Times* that the Company’s “position in the media, as is evident, was never discussed” with the Board. In fact, as quoted in detail above, the Board and Muilenburg often discussed—and complained about—how Boeing was presented in the media.

274. Calhoun misled about the Board’s deliberations in the wake of the Ethiopian Airlines Crash. He claimed that the Board met within 24 hours of the crash. He told the *Washington Post* that he “immediately corral[ed] a board discussion” after that crash. In fact, the first telephonic meeting of the Board did not occur until March 13, three days after the crash, when grounding appeared imminent, and the day after Muilenburg had lobbied President Trump to keep the 737 MAX in the air.

275. Calhoun stated that the Board met on March 13 upon learning that MCAS may have activated and decided to recommend the grounding of the 737 MAX. Calhoun omitted that by the morning of March 13, 2019, it was a foregone conclusion that the FAA would ground the plane. The Board’s “recommendation” was nothing but a public relations gesture.

276. One of Calhoun’s goals was to defend Muilenburg’s leadership. He told the *New York Times*:

Dennis is doing an outstanding job. . . . I think most importantly and where I think the board has confidence as well in that these are defining moments for any company and for industries. And I think his ability to sort of program new approaches and take this on as an opportunity to do better in every possible dimension around safety, I think that’s where he’ll shine even more so. So we have a lot of confidence in Dennis. There aren’t any battles. There’s nothing going on under the covers with him that people don’t know about.

Calhoun emphasized that Muilenburg was an “engineer” who had been “perfectly transparent” with the Board even though Muilenburg had falsely insisted, without demonstrated basis, that the 737 MAX was safe prior to the day of its grounding:

Well, I think you have to start with the premise that Dennis is an engineer. He has incredible respect for all the processes and discipline that go into the design, development and delivery of safe airplanes and then the operations for safe airplanes and the discipline required in the investigative process.

...

So I give him enormous credit internally as a company in his interactions with the board from being perfectly transparent from the

first minute. For immediately owning up and saying, This problem is ours to fix.

VIII. The Board Pays Off Muilenburg Despite His Culpability.

277. On October 11, 2019, in advance of congressional testimony, Boeing announced that the Board had stripped Muilenburg of his title as Chairman, but allowed him to continue running the Company as the CEO and remain as a director.

278. On October 18, 2019, FAA head Dickson wrote to Muilenburg to demand an immediate explanation of the content of the Forkner Text Messages and why Boeing had not disclosed them to the FAA months earlier.

279. On October 21, 2019, the Board voted to remove McAllister from his position as head of BCA.

280. On November 5, 2019, a week after congressional testimony by Muilenburg, the *New York Times* reported that Calhoun stated: “From the vantage point of our board, Dennis has done everything right.”

281. On December 12, 2019, the head of the FAA Stephen Dickson “reprimanded” Muilenburg in a “tense, private meeting” that “was a rare dressing-down for the leader of one of the world’s largest companies” in which Muilenburg “found himself promising more than he can deliver.” According to an email sent to Congress about the meeting, Dickson told Muilenburg “that Boeing’s focus

should be on the quality and timeliness of data submittals for FAA review,” and “made clear that FAA’s certification requirements must be 100% complete before return to service.”

282. The Board held its next regularly scheduled meeting on December 15 and 16, 2019. At the meeting, the Board met and resolved to remove Toulouse as senior vice president of communications. The Company subsequently announced that she “resigned.”

283. On December 16, 2019, Boeing announced it would indefinitely halt production of the 737 MAX beginning in January 2020.

284. On Sunday, December 22, 2019, the *New York Times* published an exposé detailing customer exasperation with Muilenburg, his frayed relationship with the FAA, including details of his December 12 meeting with Dickson, and his awareness in January 2019 of the Forkner Text Messages. The *New York Times* article included criticism from Gary Kelly, CEO of Southwest, Boeing’s largest customer, explaining that Muilenburg’s misplaced optimism over the 737 MAX return to service was “really creating havoc” with Southwest’s ability to plan its routes.

285. The Board called a meeting for later that day, December 22. The Board “discussed a leadership transition plan,” and voted to terminate Muilenburg

“effective immediately” and replace him with Calhoun. The Board “decided that a change in leadership was necessary to restore confidence in the Company moving forward as it works to repair relationships with regulators, customers and all other stakeholders.”

286. The Board chose not to require Muilenburg to forfeit unvested equity awards worth approximately \$38,642,304: (i) performance awards worth \$13,077,900; (ii) restricted stock units worth \$8,542,853; and (iii) performance-based restricted stock units worth \$12,691,088. Each of the plans for those equity awards provided for forfeiture if his employment terminated other than for retirement, layoff, death, or disability. Termination for cause or resignation would require forfeiture.

287. The December 22, 2019 Board meeting minutes reflect that the attorney attending that meeting provided no legal advice. The Board knew more than enough to make the determination that Muilenburg be terminated for cause. Yet, the Board chose in bad faith to pay Muilenburg in exchange for his silence. Any public dispute between Boeing and Muilenburg would have exposed the Board’s prolonged support of Muilenburg and lack of safety oversight.

288. Boeing publicly announced that Muilenburg “resigned,” but later re-characterized his departure as a “retirement,” which enabled Muilenburg to collect his unvested compensation.

289. On December 26, 2019, Boeing announced that Luttig would also “retire,” which allowed Luttig to keep his unvested equity awards.

290. Muilenburg and Luttig both knew of the content of the Forkner Text Messages when they were produced to the DOJ in February 2019 and chose not to disclose them to the FAA. Muilenburg and Luttig were the two leading figures in Boeing’s dealings with the DOJ, which later determined that Boeing had “frustrated the Fraud Section’s investigation” and “did not timely and voluntarily disclose to the Fraud Section” criminal conduct by Boeing.

291. Calhoun took over as CEO in early January 2020. Two months after taking the helm, and four month after praising Muilenburg as someone who “has done everything right,” Calhoun gave an interview to the *New York Times* in which he questioned Muilenburg’s leadership. Calhoun stated that Board “never seriously questioned [Muilenburg’s] strategy, in part because before the first MAX crash off the coast of Indonesia in October 2018, the company was enjoying its best run in years.” Calhoun acknowledged that “he’d never be able to judge what motivated [Muilenburg], whether it was a stock price that was going to continue to

go up and up, or whether it was just beating the other guy to the next rate increase,” concluding that “[i]f anybody ran over the rainbow for the pot of gold on stock, it would have been him.” He concluded:

If [the Board] w[as] complacent in any way, maybe, maybe not, I don’t know. . . . We supported a C.E.O. who was willing and whose history would suggest that he might be really good at taking a few more risks.

IX. The Costs and Liabilities Incurred by Boeing

292. The 737 MAX fleet was grounded for 20 months, until November 18, 2020. During that time, among the engineering deficiencies rectified in the recertified 737 MAX were that MCAS now receives input from two AOA sensors at once and an AOA disagree alert is required as a standard feature in all 737 MAX cockpits. The recertified 737 MAX requires the additional pilot training Boeing had previously sought to avoid.

293. The Lion Air and Ethiopian Airlines Crashes and the grounding of the 737 MAX caused significant damage to Boeing’s profitability, credibility, reputation, and business prospects. Boeing also became exposed to substantial liability in criminal, regulatory, and private actions.

294. In January 2020, Boeing announced that the non-litigation costs associated with the grounding of the 737 MAX were likely to surpass \$18.6 billion, a significant increase over previous forecasts. This amount is nearly 20 percent of

Boeing's annual sales before the 737 MAX was grounded. The costs include approximately \$4 billion to shut down and restart the Renton, Washington factory, \$8.3 billion to compensate airlines for lost sales as a result of the 737 MAX grounding, and a total production cost of \$6.3 billion. That figure had grown to \$20 billion in Boeing's most recent quarterly filing in November 2020.

295. In 2019, Boeing's customers cancelled or postponed orders for approximately 475 MAX airplanes. In the first quarter of 2020, customers cancelled orders for another 200 planes.

296. In January 2021, Boeing entered into the DOJ Agreement in which Boeing agreed to pay a "Total U.S. Criminal Monetary Amount" of \$2.513 billion, composed of a criminal monetary penalty of \$243.6 million, compensation payments to Boeing's 737 MAX airline customers of \$1.77 billion, and the establishment of a \$500 million crash-victim beneficiaries fund. (*See Exhibit B.*)

297. Numerous private lawsuits have also been filed against the Company. Lawsuits have been filed by families of the victims of both the Lion Air and Ethiopian Airlines flights. A securities class action has been filed in the Northern District of Illinois. Ethiopian Airlines also seeks compensation from Boeing for costs associated with the crash and the grounding. Several of Boeing's customers

seek to be compensated for unfilled 737 MAX orders. Boeing also faces lawsuits from its customers, 737 MAX leasing companies, and pilot unions.

298. Boeing has also incurred reputational damage. A 2019 Atmosphere Research survey of 2,000 passengers following the 737 MAX grounding revealed that passengers were ten times more likely to describe Boeing as irresponsible, arrogant, and unsafe; two in every five passengers surveyed related that they would prefer to take a more inconvenient flight or pay more to avoid flying on a 737 MAX, once the aircraft returns to service. Boeing reached the same conclusion internally: its survey of thousands of regular fliers found that in December 2019, 40 percent of respondents would be unwilling to fly on the 737 MAX.

DEMAND ON THE BOARD WOULD HAVE BEEN FUTILE

299. Demand is futile. At each point in time from at least November 18, 2019 (the date of filing of the first derivative complaint alleging demand futility) through and including today, a majority of the members of the Board have faced a substantial likelihood of liability for failing to make any good faith effort to implement and oversee a board-level system to monitor and report on safety.

300. As of November 18, 2019, twelve of the Board's thirteen members (Defendants Bradway, Calhoun, Collins, Giambastiani, Good, Kellner, Kennedy, Liddy, Muilenburg, Schwab, Williams, and Zafirovski) had each served on the Board for over a year prior to the Ethiopian Airlines Crash, and eight of the

thirteen (Defendants Calhoun, Collins, Giambastiani, Kellner, Liddy, Schwab, Williams, and Zafirovski) had served on the Board for at least five years prior to the Ethiopian Airlines Crash.

301. As of June 12, 2020, when Co-Lead Plaintiffs filed their original complaint, nine of the Board's twelve members (Defendants Bradway, Calhoun, Collins, Giambastiani, Good, Kellner, Kennedy, Schwab, and Williams) had each served on the Board for over a year prior to the Ethiopian Airlines Crash, and six of the twelve (Defendants Calhoun, Collins, Giambastiani, Kellner, Schwab, and Williams) had served on the Board for at least five years prior to the Ethiopian Airlines Crash.

302. All of the directors serving on the Board in December 2019 participated in the bad faith decision to allow Muilenburg to "retire" and collect unvested equity-based compensation worth more than \$38 million.

CLAIMS FOR RELIEF

COUNT I

Breach Of Fiduciary Duty **(Against the Director Defendants)**

303. Plaintiffs repeat and reallege each and every allegation above as if set forth fully herein.

304. The Director Defendants owed fiduciary duties to Boeing and its stockholders, including, without limitation, implementing and overseeing a system

to monitor aircraft performance and safety, the corporation's operational viability, and legal compliance. The Director Defendants had a fundamental duty to make good faith efforts to ensure that the Company's aircraft are not a danger to public safety.

305. The Director Defendants consciously breached their fiduciary duties and violated their corporate responsibilities in at least the following ways:

a. in advance of the Lion Air Crash, director defendants Duberstein, Zafirovski, Collins, Liddy, Giambastiani, Calhoun, Schwab, Williams, Kellner, Good, Bradway, Stephenson, and Kennedy, despite being made aware of red flags concerning airplane safety, consciously and repeatedly failed to assure that a reasonable information and reporting system exists, and failed to actively monitor or oversee those systems, thus disabling them from being informed of risks or problems requiring their attention;

b. following the Lion Air Crash, director defendants Duberstein, Zafirovski, Collins, Liddy, Giambastiani, Calhoun, Schwab, Williams, Kellner, Good, Bradway, and Kennedy, despite being made aware of red flags concerning the operation, development, and non-disclosure of MCAS, continued to consciously disregard their duty to investigate red flags and to remedy any misconduct uncovered; and

c. following the Ethiopian Airlines Crash, and following regulatory findings and testimony concerning the flawed development of MCAS, and despite knowing that Muilenburg had failed to investigate safety concerns, had falsely assured the public about the safety of the 737 MAX, had falsely dismissed accurate criticism of MCAS and of pilot education about MCAS, had held back information about MCAS from the FAA, director defendants Zafirovski, Collins, Liddy, Giambastiani, Calhoun, Schwab, Williams, Kellner, Good, Bradway, and Kennedy, decided to cash out Muilenburg's unvested equity-based compensation.

306. As a direct and proximate result of the Director Defendants' conscious failure to perform their fiduciary duties, Boeing has sustained significant damages both financially and to its corporate image and goodwill. Such damages to Boeing caused by the Director Defendants' misconduct include substantial penalties, fines, damage awards, settlements, and expenses.

307. As a result of the conscious and bad faith misconduct alleged herein, the Director Defendants are liable to the Company.

COUNT II
Breach of Fiduciary Duty
(Against the Officer Defendants)

308. Plaintiffs repeat and reallege each and every allegation above as if set forth fully herein.

309. The Officer Defendants owed Boeing and its stockholders the highest obligations of due care and loyalty in the administration of the affairs of the Company, including, without limitation, operating the Company in compliance with laws and without undue risk to public safety, implementing and overseeing programs to comply with laws and regulations governing the development, sale, and marketing of aircraft, and reporting significant risks to the Board, regulators, and stockholders.

310. The Officer Defendants consciously breached their fiduciary duties and/or acted with gross negligence in at least the following ways:

- a. consciously and repeatedly failing to implement and actively monitor or oversee a compliance and safety program;
- b. consciously disregarding their duty to investigate red flags and to remedy any misconduct uncovered; and
- c. covering up the extreme safety risks of Boeing's aircraft.

311. McNerney, as the CEO, President, and Chairman of the Board until March 2016, is responsible for the failure of Boeing to implement Board-level safety reporting systems during his tenure.

312. Muilenburg, as CEO between July 2015 and December 22, 2019, is responsible for the failure of Boeing to implement Board-level safety reporting

systems during his tenure, and for his failure act responsibly in response to the Lion Air and Ethiopian Airlines Crashes.

313. McAllister, as Executive Vice President of the Company and President and CEO of BCA from November 2016 until October 22, 2019, is responsible for the safety oversight failures and compliance oversight failures respecting the 737 MAX during his tenure.

314. Conner, as President and CEO of BCA from June 2012 until November 2016, is responsible for the safety oversight failures and compliance oversight failures respecting the 737 MAX during his tenure.

315. Smith, as Boeing's CFO from 2011 to 2019, is responsible for Boeing's failure to incorporate the costs and benefits of sufficient safety oversight and FAA compliance into Boeing's financial management of the development and production of the 737 MAX.

316. Luttig, as Boeing's EVP and General Counsel from May 2006 to May 2019, and as Counselor and Senior Advisor to Muilenburg and the Board, from May 2019 until December 2019, is responsible for the failure of Boeing to implement Board-level safety reporting systems during his tenure and for the bad faith responses of Boeing to the Lion Air Crash and the legal and regulatory proceedings that followed.

317. Hyslop, as Chief Technology Officer from April 2016 and Chief Engineer since September 2019, is responsible for the failures of safety oversight during his tenure.

318. Sands, first as Senior Vice President of Boeing's Office of Internal Governance and Administration and later Chief Ethics and Compliance Officer, was responsible for the failure of Boeing to implement Board-level safety reporting systems during her tenure.

319. As officers of the Company, the Officer Defendants are not entitled to exculpation under 8 *Del. C.* § 102(b)(7).

320. As a direct and proximate result of the Officer Defendants' conscious and/or grossly negligent failure to perform their fiduciary duties, Boeing has sustained significant damages both financially and to its corporate image and goodwill. Such damages to Boeing caused by the Officer Defendants' misconduct include, and will include, massive operational cost increases, substantial penalties, fines, damages awards, settlements, expenses, increased regulatory scrutiny (including increased difficulty in operating in certain legal jurisdictions), increased cost of capital, and other liabilities described herein.

321. As a result of the misconduct alleged herein, the Officer Defendants are liable to the Company.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs demand judgment as follows:

a. determining that this action is a proper derivative action maintainable under the law and that demand was excused;

b. finding that Defendants consciously breached their fiduciary duties through their bad faith misconduct, including their failure to make a good faith effort to implement and oversee an effective safety monitoring and compliance system;

c. finding that the Officer Defendants acted with, at a minimum, gross negligence;

d. against all Defendants and in favor of the Company for the amount of any and all damages sustained by Boeing as a result of Defendants' breaches of fiduciary duties, including any and all damages compensable by statute and/or law;

e. directing the Director Defendants to take necessary actions to enhance the Company's governance to comply with applicable laws and to protect Boeing and its stockholders from repeating the harms described herein;

f. awarding to Boeing restitution from all Defendants, and each of them, and ordering disgorgement of all profits, benefits, and other compensation obtained by Defendants, including payment of unvested equity-based compensation;

g. awarding to Plaintiffs the costs and disbursements of the action, including reasonable attorneys' fees, accountants', consultants' and experts' fees, costs, and expenses; and

h. granting such further relief as the Court deems just and proper.

FRIEDLANDER & GORRIS, P.A.

/s/ Joel Friedlander

OF COUNSEL:

LIEFF CABRASER HEIMANN &
BERNSTEIN, LLP

Richard M. Heimann
Katherine Lubin Benson
275 Battery Street, 29th Floor
San Francisco, CA 94111-3339
(415) 956-1000

Steven E. Fineman
Nicholas Diamand
Sean Petterson
Rhea Ghosh
Kartik S. Madiraju
250 Hudson Street, 8th Floor
New York, NY 10013-1413
(212) 355-9500

Joel Friedlander (Bar No. 3163)
Jeffrey M. Gorris (Bar No. 5012)
Christopher M. Foulds (Bar No. 5169)
1201 N. Market Street, Suite 2200
Wilmington, DE 19801
(302) 573-3500

Co-Lead Counsel

DATED: January 29, 2021

CERTIFICATE OF SERVICE

I hereby certify that, on February 5, 2021, I caused a true and correct copy of **Public Version of Verified Amended Consolidated Complaint** to be served upon the following counsel of record by File&Serve*Xpress*:

P. Bradford deLeeuw, Esquire
DELEEUEW LAW LLC
1301 Walnut Green Road
Wilmington, DE 19807

Robert D. Goldberg, Esquire
BIGGS & BATTAGLIA
921 North Orange Street
P.O. Box 1489
Wilmington, DE 19899

Kurt M. Heyman, Esquire
Gillian L. Andrews, Esquire
HEYMAN ENERIO GATTUSO
& HIRZEL LLP
300 Delaware Avenue, Suite 200
Wilmington, DE 19801

Michael J. Barry, Esquire
Kimberly A. Evans, Esquire
Rebecca A. Musarra, Esquire
Vivek Upadhyia, Esquire
GRANT & EISENHOFER, P.A.
123 Justison Street
7th Floor
Wilmington, DE 19801

Samuel L. Closic, Esquire
Kevin H. Davenport, Esquire
Mary S. Thomas, Esquire
Jason W. Rigby, Esquire
PRICKETT JONES
& ELLIOTT, P.A.
1310 King Street
Wilmington, DE 19801

Blake Rohrbacher, Esquire
Kevin M. Gallagher, Esquire
RICHARDS LAYTON
& FINGER P.A.
One Rodney Square
920 North King Street
Wilmington, DE 19801

/s/ Joel Friedlander

Joel Friedlander (Bar No. 3163)