

November 13, 2020

Stephen Dickson, Administrator
Federal Aviation Administration (FAA)
U.S. Department of Transportation
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. Dickson,

It is now abundantly clear that instead of clearing out top Federal Aviation Administration (FAA) operatives who have worked to make the FAA safe for Boeing, you have thrown in your lot with Ali Bahrami and Daniel Elwell and unwisely kept aviation industry apologists in positions of authority. You have effectively joined the top corporate culture of the FAA's management that is infatuated with the Organization Designation Authorization Program (ODA) abdication to Boeing, while too often overruling the agency's own engineers, just as Boeing has done with their engineers who objected to unsafe decisions down to the shop floor.

Safety advocates have waited in vain for you to address the strip mining of the FAA's budget over the years and the decline in its technical capacity, even though you have a receptive Chair of the House Appropriations Subcommittee on Transportations, Congressman David Price, who can assist you in restoring and rebuilding FAA's competence and reputation.

The recent House Committee on Transportation and Infrastructure staff report on the Boeing 737 MAX released by Chairman Peter DeFazio excoriated the FAA's secrecy, its symbiotic relations with Boeing, and the specific failures of personnel (singling out Mr. Ali Bahrami – a former aerospace lobbyist in residence at the FAA). You have so far shrugged off this report with a couple of disingenuous sentences. In addition, you have apparently dismissed the two top committee Democrat's letter of October 1, 2020, insisting, *unfortunately without a subpoena*, that you “release all documents related to design revisions or evaluations related to the aircraft's safe return to service. This should include, but not be limited to, system safety assessments, related analysis, assumptions about pilot response times, and key test data concerning the safety of the aircraft.” (See attached letter and report summary).

Your continued refusal to accede to this latest request for crucial safety information indicates your confidence that Senator Roger Wicker, Senator Mitch McConnell, and the Secretary of Transportation, Elaine Chao, will shield your wholesale allegiance to Boeing's demand for secrecy. Boeing wants to fly the 737 MAX again on Boeing's proposed conditions.

The FAA keeps alluding to the past safety record of commercial airlines in the U.S. (eleven years – one fatality), but fails to recognize that the two crashes of the 737 MAX killing 346 people were caused by a flawed shortcut called MCAS that has never been used in commercial aviation before. The MCAS applied haphazardly to address a flawed aerodynamic design, which wrongfully positioned an engine on an aircraft fuselage to cause instability in flight, had never been experienced in the industry nor approved by the FAA before on any commercial aircraft. In addition, the increasing domination of software-controlled flying and of automation replacing pilot control and skills, ushers in a new era of aviation safety. These are challenges that the FAA is not presently technically equipped to meet even if it had the will to do so. Concerns about these issues come from independent experts, but also from informed unions, airline executives, and consumer groups such as Flyers Rights and Consumer Reports.

You, however, are privately expressing your opinion that blames the unalerted pilots who were sabotaged by stealth software taking control of their aircraft causing two fatal crashes and the loss of 346 people in Indonesia and Ethiopia. Can you not absorb the human factors engineering analysis in the National Transportation Safety Board (NTSB) report, along with other official evaluations? The NTSB concluded: “the assumptions that Boeing used in its functional hazard assessment of uncommanded MCAS function for the 737 MAX did not adequately consider and account for the impact that multiple flight deck alerts and indications could have on pilots’ responses to the hazard.”

The human factors and the unstable aerodynamics of the 737 MAX have made it inherently unsafe. Because you flew the (tweaked) 737 MAX for two hours, do you really think you have covered the range of prudently foreseeable scenarios that thousands of 737 MAX planes will encounter around the world with an inadequate MCAS fix serving as a decoy that will distract the flying public from the other real problems with the 737 MAX known to your agency?

Reliable sources report that you are ready to unground the 737 MAX while ignoring the basic aerodynamic problem of the plane’s “quick and dirty” engine position/fuselage mismatch, the cable/rudder vulnerability, and other non-flight control issues. Both Captain Sullenberger and the Allied Pilots Association (APA) have said “not so fast.” The union for FAA’s safety engineers who work on certifying new aircraft has called for substantial upgrades, including the rescinding of several *exceptions* granted to Boeing by the FAA. Additionally, more than 340 overwhelmingly negative comments have been filed on the FAA/Boeing proposed MAX, from dozens of top aviation safety experts.

The *Seattle Times* cited specific safety improvements suggested by Captain Sullenberger that shouldn’t be shelved due to cost, adding, “Is that really something we are comfortable saying out loud to everybody who boards an airplane?” and he stated “I just don’t think that’s defensible. In safety-critical domains, ‘just good enough,’ isn’t.” The captain, based on his lengthy experience with flying conditions noted “Eventually, whatever can happen, will happen.”

When cornered and not open to technical give-and-take, the FAA provides *exceptions* and allows later fixes, often already installed on other new Boeing planes. This approach is not good enough, Mr. Dickson.

I refer you to the detailed responses by the grieving families and by Flyers Rights to your proposed rulemaking placed in your docket by September 17, 2020. Have you personally read them? Besides making their points, they ask how the FAA can engage in public rulemaking based on secret data, tests, and assessments. The 737 MAX disasters are corporate crimes, due to gross criminal negligence. Federal prosecutors with the Justice Department are reportedly presenting a sitting grand jury with claims that Boeing misled the FAA about the MCAS software. In these grave matters of life and death, involving a potential 5000 737 MAX aircraft in the hands of many airlines flying under varying conditions, you should not fall back on the frivolous claim of protecting Boeing’s so-called trade secrets, blocking the media and the many deeply interested parties and even Congressional panels from vital public scrutiny.

Secrecy perpetrated before and after the Lion Air and Ethiopian Airlines crashes is a reason why there has been no focus on, in the words of MIT professor and aerospace engineer, Xavier de Luis, an “aerodynamic solution to an aerodynamic problem.” (Professor de Luis lost his sister in the Ethiopian crash). This is the ignored, inexcusable generic design failure of this aircraft, which should be recalled for mandated modifications.

It behooves Boeing, during this Covid-19-driven airline industry slowdown, (and the mounting order cancellations), to respond ethically by executing the proper aerodynamic and structural repairs and modifications to the existing 737 MAX population. This involves lengthening the landing gear to accommodate the proper repositioning of the engines under the wings, similar to the Airbus 350 NEO, thus eliminating the need for MCAS and its associated downstream cost ramifications. This correct and proper solution costs more than the band-aid fixes applied to the MCAS, but in the big scheme of things, it should not exceed 3% to 5% of the retail price of a Boeing 737 MAX. In addition, it will allow for the future production of the 737 MAX to have the assured safety that the industry had experienced all along until the MCAS controlled 737 MAX crashed 2 planes and took the lives of 346 people. The U.S. commercial passenger aircraft safety record over the past eleven years (one fatality) has produced smugness at the FAA and its reactive tradition (that critics have called its tombstone mentality). This was grimly illustrated by the FAA's astounding insistence that the 737 MAX was a safe aircraft before and after each of the new aircraft's fatal crashes. Not forgotten either is FAA's resistance to grounding the 737 MAX until it was overwhelmed by grounding orders from the European Union and countries, including China and Canada.

In this new era of automation risks, of software piloting, Boeing chose massive stock buybacks and disinvested in R&D, lurching off its long, past engineering reputation and allowing, in the words of a veteran aviation safety specialist, "Boeing's marketeers to overrule the Boeing engineers." According to economist William Lazonick, "research, based on publicly available information, strongly suggests that the dedication of Boeing's senior executives to increasing their company's profits and stock yield – which also augmented their own compensation – resulted in management decisions that contributed to the two 737 MAX crashes." The obsession with stock buybacks is affecting other new Boeing models besides the ill-fated 737 MAX (whose flight-control system design, Captain Sullenberger, called a "deathtrap") as well as sloppily performed contracts with NASA and the Department of Defense.

With secrecy-based rulemaking, there can be no open examination by proficient analysts and experts representing their own judgment or on behalf of interested parties from Congress to consumer, labor, and the families all of whom fervently wish to protect airline passengers in future years.

If the airlines and suppliers asked for and received Boeing information denied these other parties, what does that do to your blanket dittoheading of Boeing's outrageous claim of proprietary information to cover its criminal negligence?

Captain Sullenberger, who also called for disclosure of Boeing's "hazard analysis and ... what assumptions were made," believes that the FAA's "status as the 'gold standard' among aviation regulators is 'shattered.'" You must know that the FAA's past obeisance to Boeing executives, before you took the helm, has not been good either for the Boeing company, its workers, and its future market share, with more competitors on the horizon. Recall, what happened to the leading British aerospace industry, following a series of crashes in the nineteen fifties.

End this farce of rulemaking and open the process. Stop withholding critical information that blocks open technical exchanges and critiques. Suspend this "going-through-the-motions" pretense in a regulatory process infected with a preordained conclusion. The FAA will have to defend its secret rulemaking and testing policy in federal court against a legal challenge by Flyers Rights and a host of experts and stakeholders (Flyers Rights v FAA, DDC CV-19-3749). Recent legal precedent by the DC Circuit Court holds that "secret data does not count" when an FAA safety decision is challenged. Do you and Boeing want to risk this outcome in order to defend the FAA secrecy tradition of your predecessors?

How can you reconcile the FAA secrecy policy with your and Boeing CEO Dave Calhoun's often repeated promises of total transparency in ungrounding the 737 MAX?

I am attaching technical commentary about the 737 MAX flaws and how to fundamentally *fix these planes aerodynamic* and flight control problems with production engineering known and used in prior aircraft by both Boeing and Airbus. These observations from 'subject matter specialists' are anonymous due to their concern about retaliation – a well-known inhibition when it comes to the Boeing company and its wide range of economic networks. Imagine what these experts might find if they had had access to data requested by Congress.

As you read these points, ask yourself whether obvious questions come to your mind. Shouldn't the concerns raised in this brief attached memo be aired with your most conscientious engineers and their outside colleagues and publicly with Congress and the media? Shouldn't they be part of any recertification regulatory process?

Finally, Mr. Dickson should, heaven forbid, there be another 737 MAX crash or crashes due to causes about which you know and were repeatedly given specific notice of and which you and secretary Elaine Chao should have foreseen and prevented, do not think that responsibility – moral, political and legal (civil and criminal) will not apply.

If you are sitting on any undisclosed Boeing, et al. violations of Title 18, Sec.1001, and other incriminating materials, do not think that there will be no ethical whistleblowers coming forward or that pending civil action will not reach any horrifying cover-ups presently contained in trade secrecy envelopes. It will only be a matter of time and place.

Sincerely,



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Enclosures:

[The Design, Development & Certification Of The Boeing 737 MAX, By The Majority Staff Of The House of Representatives Committee On Transportation And Infrastructure, September 2020](#)
[Chairman Peter DeFazio and Chairman Rick Larsen Letter – October 1, 2020](#)
[737 MAX Memorandum by subject matter specialist – September 3, 2020](#)

CC: Interested parties