



Reporter: Unknown Person
Case Status: Closed
Disposition: Handled Internally
Closed Date: 04/02/2019
Summary: Comment 737 MAX 8

Open Date: 04/02/2019
Assigned Date: 04/02/2019
Due Date:
Appeal Date:

Hotline Contact Info

Lead Analyst: Kenyetta Spencer
Analyst Email: kenyetta.spencer@faa.gov
Analyst Phone #: 202-267-3758

Case Assignment

Assigned Group: Hotline Analyst
Assignment Type: Reply Directly to Reporter

Reporter Contact Info

Privacy Level: Non-Confidential
Reporter is a: General Public
Name: (b) (6)
Address: (b) (6)(b) (6)
City, State, Zip: (b) (6)(b) (6)
Contact Phone #: (b) (6)(b) (6)
Email Address: (b) (6)(b) (6)(b) (6)
Int. Phone #: (b) (6)(b) (6)

Subject Party Details

Name: Danial Elwell
Company / Org: FAA
Address:
Phone #: (b) (6)
City, State, Zip: Washington DC

Event Info

Event Date: Mar 10, 2019
Event Time:
Event Location
City, State: DC
Airline Name: Ethiopian
Flight #:
Departure Location:
Arrival Location:
Aircraft Registration:

Assignments:

Case Description: (b) (6)(b) (6)(b) (6),
 (b) (6)(b) (6)(b) (6),
 (b) (6)(b) (6)
 31 March 2019

Dear Sir,
 The aerodynamic design of Boeing 737 MAX 8 is inherently flawed. This type of aircraft should not be certified by FAA anymore and manufacturing of Boeing 737 MAX 8 should be discontinued. Such action would be analogous to not certifying a high rise building with flawed foundation design, no matter what external support structure is offered free as a 'solution' by the Builder.
 In aerodynamics performance, Boeing 737 MAX 8 has stalling tendencies due to the placement of newer engine in the older 737 body. The two (body & engine) are mismatch aerodynamically. The vector calculus aerodynamics mathematical calculations become different from older 737s due to the new engine placement.
BOEING'S UNETHICAL SOLUTION:
 Realizing this aerodynamic problem with MAX 8, Boeing rather than going back to the drawing board to do proper aerodynamic and mechanical engineering all over again to determine the proper geometry required in the aircraft and to build the plane accordingly to the proper geometry, came up with another flawed idea of providing 'Software solution' and gave it a 'sexy' fancy mind games name MCAS to 'mask out' and 'Band-Aid' the problem. This turned out to be deadly twice within 6 months with the Indonesian and Ethiopian MAX 8 plane crashes. As an ethical engineering principle, software should NEVER be used for compensating design flaws. MCAS was bad an Engineering decision right from the start. Safe passenger aircraft designs do NOT require MCAS type system. (MCAS is a military used in fighter aircrafts). MCAS on passenger planes should NOT be used and should not be certified by FAA.

WARNING: FOR OFFICIAL USE ONLY PUBLIC AVAILABILITY TO BE DETERMINED UNDER 5 USC 552



MCAS Firmware (a specialized software) is critical and Firmware bugs may have contributed to plane crashes. FAA may not have expertise in Firmware Engineering.

CHILDISH SOLUTION OFFERS

In light of inherent aerodynamic design problem, offering dual 'angle of attack sensor', 'software update', 'disagree warning light', and 'pilot retraining' on MAX 8, are all childish solutions and may be a means to divert attention of the technically naïve from becoming aware and the publicity of the root cause of aerodynamic flawed design of MAX 8.

I am an Automatic Control Systems Software Engineer with Master of Engineering Degree with over 30 years of industry experience R&D. Please feel free to contact me.

Thank you,

Yours sincerely,

(b) (6)(b) (6)
(b) (6)(b) (6)

Related Items

Label	Type	Relationship	Description	Email / Phone
(b) (6)	Person	Complainant/Reporter		(b) (6)(b) (6)
FAA	Site	Related to	Aviation Entity	(b) (6)(b) (6)

WARNING: FOR OFFICIAL USE ONLY PUBLIC AVAILABILITY TO BE DETERMINED UNDER 5 USC 552

This record contains information that belongs to the Federal Aviation Administration (FAA) and may only be used for official Government purposes. The information contained in this record may not be released without the express permission of the FAA.



Journal Entries

Journal Class	Create Date	Submitter	Category	Summary
Note	03/31/2019 07:36 PM		General Information	Hotline Form Submission - FHIS-0013782

Details

I am a(n): General Public
What Are You Reporting: Potential Violation

Information Related To Your Report

Event Date: 3/10/2019
Event Time:
Event Location:
Event City:
Event State: DC
Aircraft Registration N-
Airline: Ethiopian
Flight Number:
Departure Location:
Arrival Location:

Responsible Party

First Name: Danial
Last Name: Elwell
Email:
Company/Organization: FAA
Street Address:
Street Address 2:
City: Washington
State: DC
Zip:
Country: US
Phone: (b) (6)
Web Address:
Description: (b) (6)(b) (6)
(b) (6)(b) (6)
31 March 2019

Dear Sir,
The aerodynamic design of Boeing 737 MAX 8 is inherently flawed. This type of aircraft should not be certified by FAA anymore and manufacturing of Boeing 737 MAX 8 should be discontinued. Such action would be analogous to not certifying a high rise building with flawed foundation design, no matter what external support structure is offered free as a 'solution' by the Builder.
In aerodynamics performance, Boeing 737 MAX 8 has stalling tendencies due to the placement of newer engine in the older 737 body. The two (body & engine) are mismatch aerodynamically. The vector calculus aerodynamics mathematical calculations become different from older 737s due to the new engine placement.
BOEING'S UNETHICAL SOLUTION:
Realizing this aerodynamic problem with MAX 8, Boeing rather than going back to the drawing board to do proper aerodynamic and mechanical engineering all over again to determine the proper geometry required in the aircraft and to build the plane accordingly to the proper geometry, came up with another flawed idea of providing 'Software solution' and gave it a 'sexy' fancy mind games name MCAS to 'mask out' and 'Band-Aid' the problem. This turned out to be deadly twice within 6 months with the Indonesian and Ethiopian MAX 8 plane crashes. As an ethical engineering principle, software should NEVER be used for compensating design flaws. MCAS was bad an Engineering decision right from the start. Safe passenger aircraft designs do NOT require MCAS type system. (MCAS is a military used in fighter aircrafts). MCAS on passenger planes should NOT be used and should not be certified by FAA.
MCAS Firmware (a specialized software) is critical and Firmware bugs may have contributed to plane crashes. FAA may not have expertise in Firmware Engineering.
CHILDISH SOLUTION OFFERS
In light of inherent aerodynamic design problem, offering dual 'angle of attack sensor', 'software update', 'disagree warning light', and 'pilot retraining' on MAX 8, are all childish solutions and may be a means to divert attention of the technically naïve from becoming aware and the publicity of the root cause of aerodynamic flawed design of MAX 8.
I am an Automatic Control Systems Software Engineer with Master of Engineering Degree with over 30 years of industry experience R&D. Please feel free to contact me.
Thank you,
Yours sincerely,

WARNING: FOR OFFICIAL USE ONLY PUBLIC AVAILABILITY TO BE DETERMINED UNDER 5 USC 552

This record contains information that belongs to the Federal Aviation Administration (FAA) and may only be used for official Government purposes. The information contained in this record may not be released without the express permission of the FAA.



Journal Class	Create Date	Submitter	Category	Summary
	(b) (6) (b) (6)(b) (6)			<p><i>Other Reports on the Same Subject Matter</i></p> <p><i>To which division or office within the FAA have you reported this matter? No</i></p> <p><i>To which other federal or state agencies or other organizations have you reported this matter? No</i></p> <p><i>Contact Info</i></p> <p><i>First Name:</i> [REDACTED]</p> <p><i>Last Name:</i> (b) (6)</p> <p><i>Company:</i> Mr.</p> <p><i>Street Address:</i> (b) (6)(b) (6)(b) (6)</p> <p><i>City:</i> (b) (6)</p> <p><i>State:</i> [REDACTED]</p> <p><i>Zip:</i> (b) (6)</p> <p><i>Contact Phone:</i> (b) (6)(b) (6)</p> <p><i>Email Address:</i> [REDACTED]</p> <p><i>International Number:</i> (b) (6)(b) (6)</p>

WARNING: FOR OFFICIAL USE ONLY PUBLIC AVAILABILITY TO BE DETERMINED UNDER 5 USC 552

This record contains information that belongs to the Federal Aviation Administration (FAA) and may only be used for official Government purposes. The information contained in this record may not be released without the express permission of the FAA.