

B737 Max Summit, Montreal, Canada

In March 2019, regulators and airlines around the world grounded the B737 MAX passenger aircraft after two nearly new aircraft tragically crashed less than five months apart, killing all 346 passengers and crew. The accidents befell Lion Air Flight 610 on October 29, 2018 and Ethiopian Airlines Flight 302 on March 10, 2019.

Ethiopian Airlines was first to ground the aircraft, effective the day of the accident. On March 11, the aircraft's airworthiness was publicly reaffirmed by its certifying agency, the US Federal Aviation Administration. The same day, the CAA of China was the first regulator to order the MAX grounding.

In the next two days, most other airlines and regulators around the world grounded it as well. On March 13, the FAA was one of the last agencies to ground the MAX, citing similarities between the two crashes. In total, 387 airplanes were grounded.

From the time the B737 MAX was grounded until today, countless news articles, television/radio broadcasts, PRs, aviation expert commentary and so-called experts have been produced. Information has been provided about the relationship between regulators and the manufacturer regarding withholding important information about the aircraft type, about the cost pressures that challenge flight safety as priority number 1, about problematic issues concerning internal reporting, etc.

For IFALPA, it is important to maintain credibility in our statements and positions as safety professionals. We must, therefore, seek information from the primary source, and, at the same time, keep track of what our Member Associations and the community at large bring forward.

As part of this information gathering, IFALPA has, among other things, met with representatives of Boeing for three separate briefings. Most recently, we attended the IATA B737 MAX 2nd Summit in Montreal, just last week.

The purpose of this exceptional meeting, attended by 18 airlines, 9 regulators, Boeing, ICAO, IFALPA, CAE, lessors, and other relevant stakeholders, was to identify the challenges and gain a common understanding of a roadmap to bring the B737 MAX back to operation in the safest, most efficient, and timely manner possible.

The big question amongst all stakeholders, including IFALPA, is the "return to service" process. Views on this will vary depending on who you talk to, but for us the priorities are clear:

- 1. The technical challenges must be remedied and satisfy established safety standards;
- The regulatory processes must take place in a way that prevents a greater degree of self-regulation and removal of factors for different understanding of the systems;
- 3. The training must be adequate and relevant information about the flight systems must be available.

The absence of one or more of these points will result in a lack of trust, and that is precisely where



we have been, and still partially remain. It was therefore fruitful that the three main contributions came from Boeing, the FAA, and CAE.

Point 1 is technically being solved by Boeing and approved by the FAA. MCAS is one component of the Speed Trim System (STS). The technical fix is based on new software/Flight control law in the 737 MAX flight control computer. This will provide similar flaps-up protection to the already existing flaps-down 737NG STS. IFALPA is confident that all parts of the system are being reviewed and secured. Boeing as a company cannot withstand another accident.

Point 2 has been a concern at IFALPA for a long time. We have a long-standing cooperation with OEMs through, among others, the ADO Committee, but we have no formal lines to Certifying state and therefore have less insight into the processes surrounding certifying types. This process takes place between the individual state CAA and OEM. IFALPA and our MAs are related to the CAAs more on the oversight part. This means that we must rely on Certifying state and aircraft manufacturers to do a qualitatively good job and ensure that assessments are based on flight safety and not selling points. Are we creating software fixes to be able to sell an aircraft as one type to reduce required training? It is an important question to ask.

The FAA is focused on providing Safe and Compliant Aircraft Design and changes to MCAS design on one hand and the return-to-service process on the other. EASA, TCCA, and ANAC have a commitment to collaborative process with the FAA for certification, pilot training, and ungrounding. Given the reduced degree of trust that exists for both the manufacturer and the regulator, it will be crucial that all these regulators, as well as China, reach an agreement before the aircraft is put into service.

It would be very problematic politically to argue that the aircraft is safe when someone does not approve parts of the changes and does not return it to service. What is important to understand is that only the FAA certifies Boeing, while all other regulators validate this process.

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"It all comes down to trust. Trust towards the regulator, trust towards the manufacturer, trust towards the operator. At the Summit, all the stakeholders from IATA, FAA, and Boeing, to Regulators and ICAO, pointed to the pilots as the main symbol of trust for the public."

In this context, it is important that IFALPA coordinate our input to the FAA, EASA, Transport Canada, and ANAC, on a global level.

Normally, the inputs would come separately, through each national MA, without much use of IFALPA. However, in this context, we believe it is very important to align in the same way as the regulators do.

Point number 3, Training. This is an extremely important part of the whole problem. We have seen that the requirements for training and qualification have gradually been reduced over the last decades for economic reasons. Some will argue that new technology and reduced fail margins and frequencies mean that the need for training is not the same as it once was.

But it is precisely *because* systems have become increasingly complex and failures occur less often that there is a need for more and relevant training. As type training is recommended by the OEM and approved by the regulator; I firmly believe that, as a profession, we should have a greater say in this process.

As IFALPA's Pilot Training Standards Manual States, "In a world of growing competitions, we need to improve and increase the amount of training a professional pilot receives, not diminish it. The gradual erosion of training time will have a delayed effect as the older generation of pilots leave the left seat and take their experience with them." (https://bit.ly/2J3ikYI)

Editorial

The opportunities for varied and customized training were presented well by CAE during the meeting, but investments by the operators are required, and regulators must be able to withstand the cost perspective in their assessments. Based on Boeing's prediction of the need for 600,000 new pilots over the next 20 years, this becomes increasingly important to maintain future requirements for the flight safety standard.

As I mentioned, it all comes down to trust. Trust towards the regulator, trust towards the manufacturer, trust towards the operator. At the Summit, all the stakeholders from IATA, FAA, and Boeing, to Regulators and ICAO, pointed to the pilots as the main symbol of trust for the public. IFALPA will, in a trustworthy and reliable way, contribute to the process of return-to-service of the MAX, but always with a view to safer skies as our main goal, in this and in all our ventures.

What is IFALPA's position on the MAX at this moment? We are doing our utmost to validate the process; we cannot presently approach the public with a clean bill , but will, if and when we feel comfortable to do so.

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