



Federal Aviation Administration

Memorandum

Date: October 24, 2019

To: Steve Dickson, Administrator

From: H. Clayton Foushee, Director, Office of Audit and Evaluation, AAE-1

Subject: URGENT: Action Required. Southwest Airlines Airworthiness Concerns

In accordance with Public Law 112-95, Section 341, Paragraph 5, I am notifying you of a substantial likelihood that a violation of an order, a regulation, or provision of Federal law relating to aviation safety has occurred that requires immediate corrective action.

The Office of Audit and Evaluation (AAE) received an internal whistleblower disclosure, alleging that Southwest Airlines (SWA) has entered into service 88 aircraft, but failed to ensure conformity¹ of these aircraft that they meet all applicable FAA airworthiness requirements. The Department of Transportation Office of Inspector General (OIG) initiated their own audit of FAA oversight of SWA, and today, FAA held had an exit meeting with OIG to discuss their findings in a preliminary report, "FAA Safety Oversight of Southwest Airlines" (attached), which I provided to you and the Deputy Administrator last week. These findings expand upon the airworthiness concerns of these aircraft. Subsequent to the meeting today, we confirmed with various Flight Standards personnel that SWA continues to operate many of these aircraft without verifying that they currently meet airworthiness requirements and that FAA issued airworthiness certificates without proper documentation or a qualifying exemption. These findings merit urgent action and are summarized below.

Background

SWAA purchased 88 aircraft, which had been registered in, and operated by, one or more foreign air carriers. SWA held authority from the FAA to conduct their own conformity inspections², and contracted with CAVOK, a technical consulting and services firm, to complete these inspections. Allegedly, SWA provided little to no oversight of CAVOK, and accepted CAVOK's assurance that the aircraft were properly conformed. SWA then certified to the FAA that conformity inspections were complete and requested FAA approval to add these aircraft to the operations, which the FAA did on this assurance.

¹ A process used to evaluate an aircraft for conformance with an air carrier's program, which also ensures it meets all applicable FAA regulatory requirements, making the aircraft eligible for issuance of an FAA standard airworthiness certificate and allowed to be used in air carrier service.

² See FAA Order 8900.1, Volume 10, Chapter 9.

Through normal oversight and surveillance, the FAA became aware that some or all of these aircraft may not meet FAA airworthiness requirements³. The Supervisory Principal Maintenance Inspector (SPMI), the FAA inspector responsible for overall oversight of maintenance and airworthiness programs at SWA, concurred with these concerns and began to work with SWA to identify the scope of the problem.

As SWA began to complete additional records reviews, known as “dirty fingerprint” checks, on all records associated with a particular aircraft, it became apparent that SWA had taken credit for Alternate Means of Compliance (AMOC) and other processes that were not applicable when transferring an aircraft from foreign operation to U.S. operation. Four aircraft were subsequently found to have major repairs⁴, which did not meet FAA requirements, and these aircraft were grounded by SWA in late October 2018.

On or about November 22, 2018, SWA grounded 34 aircraft for a limited visual inspection. They only inspected the aircraft for signs of reinforcing repairs (the type which grounded four previous aircraft). The inspections did not include reinforcements resulting from ADs, major alterations, STCs, etc. They reported “no significant findings” to the SWA-CMO and returned the aircraft to service. However, this is a limited green light given the narrow nature of the visual inspections.

By December 31, 2018, SWA had completed a 100% “dirty fingerprint” review of the maintenance records. This review resulted in the following findings:

- 360 Major Repairs were found that were previously unknown to SWA because they were not reported by their contractor (CAVOK) during their initial records review of the conformity process. Immediate action was required on some of these aircraft in order to bring them back to compliance with the airworthiness requirements of the Federal Regulations.
- 44 AMOCs were found covering six ADs. These were also previously unknown to SWA because they were not reported by their contractor (CAVOK) during their initial records review of the conformity process.

Prior to completion of the “dirty fingerprint” review, and at the time the airworthiness certificates were issued, SWA admitted that they had not even translated all the maintenance records into English, making a complete check of airworthiness impossible.

Based in part upon SWA’s assurance that there were no significant findings from the limited visual inspections, AFX senior management approved a corrective action plan, which included a “nose to tail” inspection of all aircraft over a 2-year period.

Current Situation

³ Including compliance with Airworthiness Directives, inspection requirements, proper repair procedures, etc.

⁴ Repairs which affect the airworthiness of an aircraft.

As of October 4, 2019, SWA has now completed the “nose to tail” inspection on 39 aircraft. Of these, 24 (62%) have been found with significant airworthiness issues, including:

- 30 previously unknown repairs, including major repairs, for which there was no documentation.
- 42 documented major repairs, which were found by inspection to not meet FAA airworthiness requirements. This includes repairs which required immediate corrective action to bring the aircraft back into compliance.

14 CFR 121.153 states that “no certificate holder may operate an aircraft unless that aircraft...is in an airworthy condition and meets the applicable airworthiness requirements of this chapter”. Further, choosing to operate an aircraft in an unknown airworthiness condition could also be a violation of 14 CFR 119.65(d)(3), which requires that Part 119 management personnel, and “anyone in a position to exercise control over operations conducted under the operating certificate must... discharge their duties to meet applicable legal requirements and to maintain safe operations.”

The FAA has not issued an exemption to these requirements for SWA, and we do not believe one would be in the public interest. Given the significant failures of the conformity process, including the fact that airworthiness certificates were issued without even translating the maintenance records into English, we deem any assertion that those aircraft hold “valid” airworthiness certificates to be nonsensical. This is exacerbated by the more recent findings of unknown airworthiness conditions on 62% of those aircraft inspected. Any safety risk assessment (SRA) that was conducted prior to the approval of the corrective action plan should be immediately reassessed based upon these findings, as the original assumptions have proven to be invalid.⁵ NOTE: This is not unlike the reassessment of the SRA for the 737 MAX MCAS, which is now ongoing based on more recent data.

Therefore, we conclude there is a high likelihood of a violation of a regulation, order or standard of the FAA related to aviation safety which requires immediate corrective action. Additionally, SWA is unable to certify to the FAA (or the flying public) that the remaining 49 aircraft currently meet FAA airworthiness requirements, and the data collected to date would indicate that a majority of them do not.

Recommendation

For all of these reasons, we recommend that the Associate Administrator for Aviation Safety take immediate action to either suspend or revoke the airworthiness certificates of the remaining 49 aircraft, pending a reinspection in accordance with 49 U.S.C. § 44709.

⁵ Numerous personnel at the SWA-CMO have reported to AAE that they are no longer comfortable with the current corrective action plan.