

Subject: Flight Crew Oxygen Masks – Clogging of Ceramic Valves

Ref. Publications:

Zodiac Aerotechnics Service Bulletin (SB) MF10-20-35-330 dated 29 January 2018.

Applicability:

Safran Aerosystems (formerly Zodiac Aerotechnics) oxygen regulator mask assemblies, having Part Number (P/N) MF10-05-11 or P/N MF20-534.

These assemblies are known to be installed on aeroplanes manufactured by Airbus.

Description:

An occurrence was reported on breathing difficulties when using a Safran Aerosystems oxygen regulator mask assembly equipped with a ceramic pilot valve seat.

Subsequent investigation showed that this difficulty was caused by a partially clogged pilot valve seat of the regulator main casing, due to the inefficient cleaning system of the ceramic parts. A partially clogged valve may cause slightly delayed oxygen supply, which could lead, in case of prolonged use, to fatigue during the inhalation phase. However, it has been confirmed that a fully clogged pilot valve seat is detectable by operational check and, when breathing calmly, the user might not be affected by a partially clogged pilot valve seat. A partially clogged mask, in combination with smoke/toxic gas in the cockpit, or during cabin decompression, could lead to a significant increase of pilot workload, possibly resulting in reduced control of the aeroplane.

Prompted by these events, Zodiac Aerotechnics issued SB MF10-20-35-330, providing the instructions for inspection and replacement, if necessary, of the regulator main casing.

At this time, the safety concern described in this SIB is not considered to be an unsafe condition that would warrant any Airworthiness Directive (AD) action under Regulation (EU) [748/2012](#), Part 21.A.3B.

Recommendation(s):

EASA recommends operators of aeroplanes equipped with affected oxygen regulator mask assemblies to accomplish a one-time inspection and replacement, if necessary, of the regulator main casing, in accordance with the instructions of Zodiac Aerotechnics SB MF10-20-35-330.

Additionally, EASA recommends that all affected operators ensure their flight crews are aware of the risks and counsel the users to breathe calmly in case of initial breathing difficulties.

This is information only. Recommendations are not mandatory.



Contact(s):

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