FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: NM-13-24
SUBJ: Air Conditioning System: Air Distribution Fan **Date:** March 21, 2013

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin advises registered owners and operators of **certain Airbus Model A318, A319, and A320 series airplanes** of service difficulties associated with overheating of the connectors of the air distribution and recirculation fan circuit of the air conditioning system.

At this time, the airworthiness concern is not considered an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Aviation Regulations (14 CFR) part 39.

Background

We received several reports of connector overheating in the recirculation fan circuit. In one case, the flight had to be diverted due to a cargo compartment fire alert annunciation. Investigation revealed that that there was no fire in the cargo compartment; however, one of the connectors was burnt and the pins were damaged. The burnt connector and subsequent transient electrical signal resulted in false fire annunciation. Airbus determined that high fan power consumption might cause an overload of the electrical wiring. Multiple wires are fitted in adjacent cavities of the connector, which can cause a significant rise in temperature as heat does not dissipate which, in turn, could cause overheating of the connector. This supply circuit is installed with gauge 18 wires and gauge 20 connectors on the subject airplanes, but for Model A321 series airplanes the supply circuit is installed with 16 gauge wires. We determined through a risk assessment that the fan circuit breaker protected the circuit from further damage during all previously reported incidents of overheating in the recirculation fan circuit.

Airbus has issued Service Bulletin A320-21-1172, Revision 01, dated December 28, 2007, to provide operators with guidelines to modify the connectors and wiring of the air distribution and recirculation fan. The modification includes increasing the pin size and rerouting the wiring, which will prevent overheating and degradation of the connectors.

Recommendations

The FAA recommends that all owners and operators of the subject airplanes incorporate the guidelines outlined in Airbus Service Bulletin A320-21-1172, Revision 01, dated December 28, 2007.

For Further Information Contact

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For Related Service Information Contact

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