EASA SIB No.: 2018-11



Safety Information Bulletin

Airworthiness

SIB No.: 2018-11

Issued: 24 July 2018

Subject: Engine Fire Extinguishing - Wire Chafing in Pylon

Ref. Publications:

Airbus Service Bulletin (SB) A320-92-1117 original issue dated 20 March 2017.

Applicability:

Airbus A318-111, A318–112, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers (MSN).

Description:

Several operators reported finding damage on the Polytetrafluorethylene (PTFE) conduit behind a clamp and chafed wires behind the cartridge of fire extinguishing bottle 1 (5WE1/7WE1) located in the pylon primary structure. In one case, the damage led to a short circuit of the wiring supplying fire extinguishing bottle 1. Subsequent investigation determined that vibration in the area affects the horizontal part of the wire routing.

Wires for fire extinguishing bottle 2 (5WE2/7WE2) are shorter and routed vertically, and are therefore less exposed to vibration. Even with slack between the clamp and conduit, as routing is vertical, it is suspected that less shear effect is induced and damage is less likely to initiate at clamp level. No damage was reported for the wiring supplying fire extinguishing bottle 2 so far.

The wire short circuit on fire extinguishing bottle 1 was detected during scheduled maintenance task 262100-03-1 "Engine Fire Extinguishing - Check Firing Circuit Continuity", specified to be accomplished every 144 months or 18 000 flight hours in accordance with the Maintenance Planning Document (MPD) as on May 2018.

In other cases, damage was detected on the conduit between clamps during general visual inspection of the electrical wiring interconnection system installed in the lower pylon, covered by MPD Standard Zonal Tasks ZL-411-01-1 and ZL 411-01-3 which are due every 24 months as on May 2018.

To improve the situation, Airbus introduced production modification (mod) 36818 to replace the PTFE electrical conduit and clamps with a self-wrapping textile protective sleeve for the entire pylon. This mod was applied in production from MSN 3617 for A318, from MSN 3604 for A319, from MSN 3570 for A320 and from MSN 3593 for A321. For pre-mod 36818 aeroplanes, Airbus



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published SB A320-92-1117 to provide in-service modification instructions, introducing the textile protective sleeve for the entire pylon.

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

Recommendation(s):

To prevent a short circuit on the wiring of fire extinguishing bottle 1, and to improve the reliability of the fire extinguishing system, EASA recommends operators of affected aeroplanes to accomplish the modification in accordance with the instructions of Airbus SB A320-92-1117. Thereafter, operators should ensure that the aeroplane remains in that configuration.

An aeroplane on which Airbus mod 36818 was embodied in production is not affected by this SIB, provided that the aeroplane remains in this configuration.

Contact(s):

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