



Airworthiness Directive

AD No.: 2018-0200

Issued: 06 September 2018

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A320 aeroplanes

Effective Date: 20 September 2018

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Supersedure: This AD supersedes DGAC France AD 91-182-020(B) R2 dated 07 December 1994.

ATA 24 – Electrical Power – Wing Electrical Installation – Modification

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A320-211, A320-212 and A320-231 aeroplanes, all manufacturer serial numbers, except those on which Airbus modification (mod) 22626 has been embodied in production.

Definitions:

For the purpose of this AD, the following definitions apply:

Groups: Group 1 aeroplanes are those on which Airbus mod 22109 has not been embodied in production, and not embodying Airbus Service Bulletin (SB) A320-24-1045 Revision (Rev.) 3.

Reason:

Several cases of wire chafing were reported by operators, occurring in the trailing edge areas of zones 574 and 674 (both left-hand and right-hand wing) at the breakout of the electrical bundle from the conduit.

This condition, if not detected and corrected, could lead to a short circuit, possibly resulting in a fire in the concerned areas. It was also determined that this failure mode can also affect other wires installed on the wing, horizontal stabilizer and in the main landing gear (MLG) bays.



To address this unsafe condition, Airbus issued SB A320-24-1044 to provide instructions for inspection of the wires to detect chafing or signs of overheating, and SB A320-24-1045 introducing protective sleeves on electrical cables to prevent chafing.

Consequently, DGAC France issued AD 91-182-020(B) (later revised) to require those repetitive inspections, or applicable repairs depending on findings, and to install protective sleeves as terminating action for the repetitive inspections.

Since AD 91-182-020(B) R2 was issued, subsequent investigations identified, in those areas (zones 574 and 674), issues with the protective sleeves previously installed in production, through mod 22109, or in service through SB A320-24-1045.

Prompted by these findings, Airbus issued SB A320-92-1115, later revised, providing instructions for installation of a new protective sleeve on those cables localised in zones 574 and 674, and introduced in production (through mod 22626) new design electrical cables more resistant to chafing.

For the reasons described above, this AD partially retains the requirements of DGAC France AD 91-182-020(B) R2, which is superseded, and requires modification of the wing electrical installation.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

Partial Restatement of the requirements of DGAC France AD 91-182-020(B) R2:

Inspections:

- (1) For Group 1 aeroplanes: Within 450 flight hours (FH) after 31 August 1991 [the effective date of DGAC France AD 91-182-020 at original issue], and, thereafter, at intervals not to exceed 450 FH, inspect the wires installed on the wing (zones 574 and 674 through panels 574 AB and 674 AB only) in accordance with the instructions of Airbus SB A320-24-1044 Rev. 2.
- (2) For Group 1 aeroplanes: Within 1 500 FH after 31 August 1991 [the effective date of DGAC France AD 91-182-020 at original issue] and, thereafter, at intervals not to exceed 3 500 FH, inspect the wires installed on the wing and horizontal stabilizer (except zones 574 and 674 through panels 574 AB and 674 AB), in accordance with the instructions of Airbus SB A320-24-1044 Rev. 2.
- (3) For Group 1 aeroplanes: Within 1 500 FH after 17 December 1994 [the effective date of DGAC France AD 91-182-020 at Rev. 2], and, thereafter, at intervals not to exceed 3 500 FH, inspect the wires installed in the MLG bays in accordance with the instructions of Airbus SB A320-24-1044 Rev. 3.

Corrective Actions:

- (4) If, during any inspection as required by paragraph (2) or (3) of this AD, as applicable, any wire is found chafed or showing signs of overheating, before next flight, replace or repair the wire (this can be accomplished in accordance with the instructions of the Aircraft Maintenance Manual



and Aircraft Wiring Manual), and protect the loom in accordance with the instructions of Airbus SB A320-24-1044 (temporary repair) at Rev. 2 or 3, or SB A320-24-1045 at Rev. 1, 2 or 3.

- (5) If, during any inspection as required by paragraph (2) or (3) of this AD, as applicable, any wire loom is found not correctly guided centrally into the conduit end fitting, or in contact with the edge of the conduit, or which might come in contact with the edge of the conduit end fitting during vibration in flight, as applicable, before next flight, re-align and protect the loom in accordance with the instructions of Airbus SB A320-24-1044 (temporary repair) at Rev. 2 or 3, or Airbus SB A320-24-1045 at Rev. 1, 2 or 3.

Terminating Action:

- (6) Modification of electrical cables on an aeroplane in accordance with the instructions of Airbus SB A320-24-1045 at Rev. 3 constitutes terminating action for the repetitive inspections as required by paragraph (1), (2) and (3) of this AD for that aeroplane.

New requirements of this AD:

Corrective Action:

- (7) If, during any inspection as required by paragraph (1) of this AD, any wire is found chafed or showing signs of overheating, before next flight, replace or repair the wire (this can be accomplished in accordance with the instructions of the Aircraft Maintenance Manual and Aircraft Wiring Manual), and install protective sleeves on the electrical cables in accordance with the instructions of Airbus SB A320-92-1115 Rev. 1.
- (8) If, during any inspection as required by paragraph (1) of this AD, any wire loom is found not correctly guided centrally into the conduit end fitting, or in contact with the edge of the conduit, or which might come in contact with the edge of the conduit end fitting during vibration in flight, as applicable, before next flight, install protective sleeves on the electrical cables in accordance with the instructions of Airbus SB A320-92-1115 Rev. 1.

Modification:

- (9) Within 72 months after the effective date of this AD, unless already done as required by paragraph (7) or (8) of this AD, install protective sleeves on the electrical cables in zones 574 and 674 in accordance with the instructions of Airbus SB A320-92-1115 Rev. 1.
- (10) After modification of an aeroplane as required by paragraph (9) of this AD, do not modify that aeroplane in zones 574 and 674 in accordance with the instructions of Airbus SB A320-24-1044 or Airbus SB A320-24-1045.

Credit:

- (11) Corrective actions accomplished on an aeroplane before the effective date of this AD in accordance with the instructions of Airbus SB A320-24-1044 (temporary repair) at Rev. 2 or 3, or Airbus SB A320-24-1045 at Rev. 1, 2 or 3, are acceptable to comply with the requirements of paragraph (7) and (8) of this AD for that aeroplane.
- (12) Modification of an aeroplane before the effective date of this AD in accordance with the instructions of Airbus SB A320-92-1115 original issue and Airbus Technical Adaptation (TA)



80378898/008/2017 is acceptable to comply with the requirements of paragraphs (7), (8) and (9), as applicable, of this AD for that aeroplane.

Terminating Action:

(13) Modification of all protective sleeves on the electrical cables in zones 574 and 674 of an aeroplane as required by paragraph (9) of this AD constitutes terminating action for the inspections as required by paragraph (1) of this AD for that aeroplane.

Ref. Publications:

Airbus SB A320-24-1044 Rev. 2 dated 30 March 1992, or Rev. 3 dated 12 March 1993.

Airbus SB A320-24-1045 Rev. 1 dated 23 August 1991, or Rev. 2 dated 12 April 1992, or Rev. 3 dated 10 June 1993, or Rev. 4 dated 29 December 1994.

Airbus SB A320-92-1115 original issue dated 11 April 2017, or Rev. 1 dated 14 August 2018.

Airbus TA 80378898/008/2017 issue 1 dated 16 November 2017.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was posted on 18 June 2018 as PAD 18-082 for consultation until 16 July 2018. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAS; Fax +33 5 61 93 44 51; E-mail: account.airworth-eas@airbus.com.

