

Airworthiness Directive

AD No.: 2021-0172

Issued: 20 July 2021

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 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 (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A318, A319, A320 and A321 aeroplanes

Effective Date: 03 August 2021

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Supersedure: This AD supersedes AD 2021-0045 dated 16 February 2021.

ATA 25 – Equipment / Furnishings – 80VU Rack Attachments – Inspection / Repair

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A318-111, A318-112, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-215, 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.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A320-25-1BKJ Revision 02.

Package A Affected part: 80VU (View Unit) lower lateral fittings, both left-hand (LH) and right-hand (RH) sides; lower central support.

Package B Affected part: 80VU upper fittings and lower lateral pyramids structure side, both LH and RH sides, central posts and shelves attachments at central and lateral posts.

Groups:

Group	Aeroplane Configuration(s) (see Note 1 of this AD)
1	Airbus modification (mod) 34804 not embodied in production, and Airbus SB A320-53-1215 and SB A320-25-1557 and Repair Instruction (RI) Number R53113174000 (LH) and RI Number R53113174001 (RH) not embodied in service
2	Airbus mod 34804 not embodied in production, Airbus SB A320-53-1215 and RI Number R53113174000 (LH) and RI Number R53113174001 (RH) not embodied in service, and Airbus SB A320-25-1557 original issue, Revision 1 or Revision 2 embodied in service
3	Airbus mod 34804 not embodied in production, and Airbus SB A320-53-1215 and SB A320-25-1557 embodied in service; or Airbus mod 34804 not embodied in production, and Airbus SB A320-53-1215 and RI Number R53113174000 (LH) and RI Number R53113174001 (RH) embodied in service
4	Airbus mod 34804 embodied in production

Note 1: Airbus SB A320-25-1557 Revision 3 includes reference to Airbus SB A320-53-1215 as concurrent requirement.

Reason:

Damage to the lower lateral fittings of the 80VU rack, typically elongated holes, migrated bushes, and/or missing bolts have been reported on in-service aeroplanes not having Airbus mod 34804 embodied. The 80VU rack contains computers for flight controls, communication and radio-navigation. In addition, damage to the lower central support fitting (including cracking) has been reported.

Failure of the 80VU fittings, in combination with a high load factor or strong vibration, could lead to failure of the rack structure and/or computers or rupture/disconnection of the cable harnesses to one or more computers located in the 80VU rack. Even though the computer functions are duplicated across other racks, multiple system failures or (partial) disconnection of systems, if occurring during a critical phase of flight, could result in reduced control of the aeroplane.

To address this potential unsafe condition, EASA issued AD 2007-0276 to require repetitive inspections of the lower lateral 80VU fittings and the lower central 80VU support and, depending on findings, the accomplishment of corrective actions. AD 2007-0276 was revised to introduce a reinforced lower central support as an optional terminating action for the repetitive inspections.

After EASA AD 2007-0276R1 was issued, prompted by in-service experience, the previous inspection program was reassessed, introducing new conditions of inspection for a new finding on the lower central fitting attachment (crack in the lower of the lateral flanges), and a new visual inspection of the upper fittings and shelves of the 80VU. In addition, it was determined that the replacement of a cracked lateral fitting or central support with a lateral fitting or central support having the same part number was no longer preferable as corrective action.



EASA issued AD 2012-0134, superseding EASA AD 2007-0276R1, to require the implementation of the amended inspection program and including reference to the optional terminating action.

After that AD was issued, new damage was reportedly found on aeroplanes having embodied Airbus SB A320-53-1215 and SB A320-25-1557, which therefore could no longer be considered as terminating action to the repetitive inspections. Damage was also found on aeroplanes on which Airbus mod 34804 was embodied. Consequently, Airbus issued the SB, as defined in this AD, to introduce new repetitive inspections of the 80VU rack.

EASA consequently issued AD 2021-0045, superseding EASA AD 2012-0134, to expand the Applicability and require new repetitive inspections.

Since that AD was issued, new damage occurrences have been reported, and a different compliance time has been determined for certain affected parts, depending on aeroplane configuration. It is expected that Airbus documentation will be updated accordingly at next scheduled revision.

For the reasons described above, this AD retains the requirement of EASA AD 2021-0045, which is superseded, but requires accomplishment of the initial inspection for certain aeroplane configurations at a different compliance time.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within the compliance time as defined in Table 1 of this AD, or within 500 flight cycles (FC) after the effective date of this AD, whichever occurs later, as applicable, and, thereafter, at intervals not to exceed the value defined in Table 1 of this AD, as applicable, accomplish a Special Detailed Inspection (SDI) of the Package A affected parts, in accordance with the instructions of the SB.
- (2) Within the compliance time as defined in Table 2 of this AD, or within 500 FC after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not to exceed the value defined in Table 2 of this AD, as applicable, accomplish an SDI of the Package B affected parts, in accordance with the instructions of the SB.

Note 2: Following embodiment of Airbus SB A320-53-1215 and SB A320-25-1557, a Group 1 aeroplane is then considered to be a Group 3 aeroplane. Following embodiment of Airbus SB A320-53-1215, a Group 2 aeroplane is then considered to be a Group 3 aeroplane.



Table 1 – Inspection Threshold and Interval for Package A Affected Part

Group	Compliance Time (see Note 2 of this AD)	Interval (not to exceed)
1	Before exceeding 19 500 FC since aeroplane first flight or last repair in accordance with the instructions of Airbus SB A320-25A1555 at any revision, or within 500 FC since last inspection per Airbus SB A320-25A1555 at Revision 3, whichever occurs later	500 FC
2	Within 19 500 FC after Airbus SB A320-25-1557 embodiment or after last repair in accordance with RI R53113174000 and R53113174001, or within 500 FC after the last inspection per Airbus SB A320-25A1555 at Revision 3, whichever occurs later	
3	Lower lateral support: Within 19 500 FC after SB A320-25-1557 embodiment or after last repair in accordance with RI R53113174000 and R53113174001, whichever occurs later	1 000 FC
	Lower central support: Within 19 500 FC after SB A320-53-1215 embodiment	
4	Lower lateral support: Before exceeding 19 500 FC since aeroplane first flight or within 19 500 FC after last repair in accordance with RI R53113174002 and R53113174003, whichever occurs later	
	Lower central support: Before exceeding 19 500 FC since aeroplane first flight	

Table 2 – Inspection Threshold and Interval for Package B Affected Part

Group	Compliance Time (see Note 2 of this AD)	Interval (not to exceed)
1	Before exceeding 19 500 FC since aeroplane first flight	500 FC
2		
3	Before exceeding 19 500 FC since aeroplane first flight	1 000 FC
4		

Corrective Action(s):

- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any discrepancy is detected, accomplish the applicable corrective action(s) within the compliance time as specified in, and in accordance with the instructions of, the SB.
- (4) For Group 2 aeroplanes: Where the SB provides instructions to modify the aeroplane in accordance with the instructions of Airbus SB A320-53-1215 concurrently with RI R53113174000 and RI R53113174001, accomplishment of Airbus SB A320-53-1215 only on an aeroplane, provided no damage on lateral fittings has been detected, is acceptable to comply with the requirements of paragraph (3) of this AD for that aeroplane. See note 2 for subsequent inspection intervals.



Reporting:

- (5) Within 90 days after accomplishment of each SDI as required by paragraph (1) or (2) of this AD, as applicable, or within 90 days after the effective date of this AD, whichever occurs later, report the inspection results (including no findings for the initial inspection only) to Airbus. Using the inspection report attached to the SB is an acceptable method to comply with this requirement.

Terminating Action:

- (6) None.

Ref. Publications:

Airbus SB A320-25A1555 Revision 03 dated 28 February 2012.

Airbus SB A320-25-1557 original issue dated 14 June 2007, Revision 01 dated 07 February 2008, Revision 02 dated 05 November 2008, or Revision 03 dated 01 July 2013.

Airbus SB A320-53-1215 original issue dated 05 November 2008, or Revision 01 dated 26 July 2013.

Airbus SB A320-25-1BKJ Revision 02 dated 09 April 2020.

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 12 May 2021 as PAD 21-070 for consultation until 09 June 2021. 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 EASA Safety Information Section, Certification Directorate. 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](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – IIASA; E-mail: account.airworth-eas@airbus.com.

