

# Airworthiness DirectiveAD No.:2022-0120R1Issued:30 June 2022

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

# **Design Approval Holder's Name:**

# Type/Model designation(s):

AIRBUS S.A.S.

A318, A319, A320 and A321 aeroplanes

Effective Date:	07 July 2022 (same as original issue)
TCDS Number(s):	EASA.A.064
Foreign AD:	Not applicable
Revision:	This AD revises EASA AD 2022-0120 dated 23 June 2022, which superseded EASA AD 2021-0172 dated 20 July 2021.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 04.

**Zone**: Zone A are 80VU (View Unit) lower lateral fittings. Zone B is lower central support (central pyramid). Zone C are central post, upper fittings, shelves attachments and lateral pyramid structure side.



#### 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, SB A320-25-1557, Repair Instruction (RI) Number R53113174000 (left-hand, LH) and RI Number R53113174001 (right-hand, RH) not embodied in service
2	Airbus mod 34804 not embodied in production, and Airbus SB A320-53-1215, RI Number R53113174000 (LH) and RI Number R53113174001 (RH) not embodied in service, and Airbus SB A320-25-1557 original issue, Revision 01 or Revision 02 embodied in service or Airbus mod 34804 not embodied in production, and Airbus SB A320-53-1215 not embodied in service, and RI Number R53113174000 (LH) and RI Number R53113174001 (RH) 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, 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 03 includes reference to Airbus SB A320-53-1215 as concurrent requirement.

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

# Reason:

Damage to the lower lateral fittings of the 80VU rack, typically elongated holes, migrated bushes, and/or missing bolts, has 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, Airbus published SB A320-25A1555 and SB A320-25-1557 original issue, and 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. That AD was later revised to introduce a reinforced lower central support (SB A320-53-1215) as an optional terminating action for the repetitive inspections.

After EASA AD 2007-0276R1 was issued, prompted by in-service experience, Airbus published SB A320-25A1555 Revision 03 to amend the inspection program, and EASA issued AD 2012-0134, superseding EASA AD 2007-0276R1, to require those inspections at reduced intervals.

After that AD was issued, new damage was found on aeroplanes having Airbus SB A320-53-1215 and SB A320-25-1557 embodied, which therefore could no longer be considered terminating action for the repetitive inspections. Damage was also found on aeroplanes on which Airbus mod 34804 (VU reinforcement – 1<sup>st</sup> step) was embodied in production. Consequently, Airbus published SB A320-25-1BKJ Revision 02 providing new instructions for inspection of the 80VU rack, and EASA issued AD 2021-0045, which superseded EASA AD 2012-0134, to expand the Applicability and require those new repetitive inspections.

After that AD was issued, additional damage was reported which led to an amendment of the compliance time to inspect certain affected parts, depending on aeroplane configuration. Consequently, EASA issued AD 2021-0172, superseding EASA AD 2021-0045, to update the compliance time for the various configurations.

After that AD was issued, following customer feedback, Airbus published the SB, as defined in this AD, to amend and provide additional clarification on the threshold and compliance time for inspection applicable to each aeroplane configuration and zone.

Consequently, EASA issued AD 2022-0120, retaining the requirements of EASA AD 2021-0172, which was superseded, and requiring accomplishment of inspections and corrective actions in accordance with the amended SB instructions.

Since that AD was issued, it has been determined that the threshold for inspection of Group 2 aeroplanes in zone B has to be calculated from the effective date of this AD, not from the effective date of EASA AD 2021-0172.

For the reason described above, this AD is revised to amend Table 1 accordingly.

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

Required as indicated, unless accomplished previously:

#### Inspection(s):

 Before exceeding the threshold and, thereafter, at intervals as defined in Table 1 of this AD, as applicable depending on aeroplane group and zone, accomplish a Special Detailed Inspection (SDI) of the each zone in accordance with the instructions of the SB.



Group	Zone	Threshold	Interval
1	А	Before exceeding 19 500 flight cycles (FC) since aeroplane first flight, or before exceeding 19 500 FC since last repair per Airbus SB A320-25A1555 at any revision,	
	В	or within 500 FC since last inspection per Airbus SB A320-25A1555 Revision 03, or within 500 FC after 03 August 2021 [the effective date of EASA AD 2021-0172]	Within 500 FC
		whichever occurs later Before exceeding 19 500 FC since aeroplane first flight	
	с	or within 500 FC after 03 August 2021 [the effective date of EASA AD 2021-0172]	
		whichever occurs later	
2	А	Within 19 500 FC after Airbus SB A320-25-1557 embodiment, or within 19 500 FC after last repair per RI R53113174000 and R53113174001, or within 500 FC since last inspection per Airbus SB A320-25A1555 Revision 03, or within 500 FC after 03 August 2021 [the effective date of EASA AD 2021-0172]	
		whichever occurs later	Within 500 FC
	В	Before exceeding 19 500 FC since aeroplane first flight, or before exceeding 19 500 FC since last repair per Airbus SB A320-25A1555 at any revision, or within 500 FC since last inspection per Airbus SB A320-25A1555 Revision 03, or within 500 FC after the effective date of this AD whichever occurs later	500 FC
		Before exceeding 19 500 FC since aeroplane first flight	
	с	or within 500 FC after 03 August 2021 [the effective date of EASA AD 2021-0172]	Within 500 FC
		whichever occurs later	

# Table 1 – SDI by Group and Zone



Group	Zone	Threshold	Interval
3	Α	Within 19 500 FC after Airbus SB A320-25-1557 embodiment, or Within 19 500 FC after last repair per RI R53113174000 and R53113174001, or within 500 FC after 03 August 2021 [the effective date of EASA AD 2021-0172] whichever occurs later	
	В	Within 19 500 FC after SB A320-53-1215 embodiment or within 500 FC after 03 August 2021 [the effective date of EASA AD 2021-0172] whichever occurs later	Within 1 000 FC
	с	Before exceeding 19 500 FC since aeroplane first flight or within 500 FC after 03 August 2021 [the effective date of EASA AD 2021-0172] whichever occurs later	
4	A	Before exceeding 19 500 FC since aeroplane first flight, or within 19 500 FC after last repair per RI R53113174002 and R53113174003, or within 500 FC after 03 August 2021 [the effective date of EASA AD 2021-0172]	
	В	whichever occurs later Before exceeding 19 500 FC since aeroplane first flight or within 500 FC after 03 August 2021 [the effective date of EASA AD 2021-0172] whichever occurs later	Within 1 000 FC
	с	Before exceeding 19 500 FC since aeroplane first flight or within 500 FC after 03 August 2021 [the effective date of EASA AD 2021-0172] whichever occurs later	

# Table 1 – SDI by Group and Zone – continued



# **Corrective Action(s):**

(2) If, during any inspection as required by paragraph (1) of this AD, 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.

# Credit:

- (3) Inspections and corrective action(s), accomplished on an aeroplane before the effective date of this AD in accordance with the instructions of Airbus SB A320-25-1BKJ at Revision 02 or Revision 03, are acceptable to comply with the requirements of paragraph (1) and (2) of this AD for that aeroplane. From the effective date of this AD, corrective actions have to be accomplished in accordance with the instructions of the SB.
- (4) For Group 2 aeroplanes on which damage was previously found during SDI, but not on lateral fittings: Accomplishment on an aeroplane, before the effective date of this AD, of Airbus SB A320-53-1215 only (instead of accomplishment of Airbus SB A320-53-1215 concurrently with RI R53113174000 and RI R53113174001) in accordance with the instructions of Airbus SB A320-25-1BKJ Revision 02, is acceptable to comply with the requirements of paragraph (2) 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) of this AD, or within 90 days after the effective date of this AD, whichever occurs later, report the inspection results (including no findings for the first inspection only) to Airbus. Using the inspection report attached to Airbus SB A320-25-1BKJ Revision 02, or Revision 03, or Revision 04 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, or Revision 01 dated 07 February 2008, or 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, or Revision 03 dated 17 February 2022, or Revision 04 dated 29 April 2022.

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.



- The original issue of this AD was posted on 22 March 2022 as PAD 22-030 for consultation until 19 April 2022. The Comment Response Document can be found in the <u>EASA Safety Publications</u> <u>Tool</u>, 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: <u>ADs@easa.europa.eu</u>.
- 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 <u>EU aviation safety</u> 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 1IASA; E-mail: <u>account.airworth-eas@airbus.com</u>.

