Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 25-055

Issued: 26 March 2025

Note: This Proposed Airworthiness Directive (PAD) 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 accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.
All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:
AIRBUS S.A.S.

Type/Model designation(s):
A330 aeroplanes

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.A.004

Foreign AD: Not applicable

Revision: This AD supersedes EASA AD 2023-0111R1 dated 28 May 2024.

ATA – Aircraft Flight Manual – Sections Limitations and Normal Procedures – Amendment

ATA – Master Minimum Equipment List – Amendment

ATA 36 – Pneumatic – High Pressure Valve – Modification / Inspection / Replacement

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Manufacturer(s):
Airbus

Applicability:
Airbus A330-841 and A330-941 aeroplanes, all manufacturer serial numbers.

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

Affected HPV clip: Engine bleed air system (EBAS) high pressure valve (HPV) clips, having Part Number (P/N) 6764-222.

Affected HPV: EBAS HPV having P/N 71070A010001 or P/N 71070A020001.

Serviceable HPV: An affected HPV equipped with affected HPV clips which are new (not previously installed on any HPV), or which accumulated less than 4 000 flight hours (FH) and less than 600 flight cycles (FC) since first installation on an HPV; and EBAS HPV, eligible for installation in accordance with Airbus instructions, which is not an affected HPV.
On the issue date of this AD, EBAS HPV P/N 71070A03001 is available as non-affected HPV.

The AOT: Airbus Alert Operators Transmission (AOT) A36L009-22 Revision (rev.) 02.

The SB 3055R1: Airbus SB A330-36-3055 rev. 1.

The AFM-TR 811: Airbus A330 Airplane Flight Manual (AFM) Temporary Revision (TR) 811 Issue 1.

The AFM-TR 813: Airbus A330 AFM TR 813 Issue 1.

The MMEL update: Airbus A330/A340 Master Minimum Equipment List (MMEL) items listed below, as provided in Airbus A330/A340 MMEL Major Event Revision (MER) dated 25 August 2022:

- Item 21-52-01 Air Conditioning Pack
- Item 36-11-01 Engine Bleed Air Supply System
- Item 36-11-06 Engine Bleed IP Check Valve
- Item 36-11-07 Engine Bleed HP Valve

The BMC SW 5.0 MMEL content: Airbus A330/A340 Master Minimum Equipment List (MMEL) items applicable to aeroplanes equipped with BMC SW 5.0 (or later standard) listed below:

- Item 21-52-01 Air Conditioning Pack
- Item 36-11-01 Engine Bleed Air Supply System
- Item 36-11-03 Engine Bleed Overpressure Valve
- Item 36-11-06 Engine Bleed IP Check Valve
- Item 36-11-07 Engine Bleed HP Valve
- Item 36-11-09 Engine Bleed Valve Monitoring

The OPV-MMEL content: Airbus A330/A340 MMEL item applicable to aeroplanes equipped with BMC SW 4.0 or BMC SW 4.1 listed below, as provided in Airbus A330/A340 MMEL MER dated 10 February 2025:

- Item 36-11-03 Engine Bleed Overpressure Valve

Groups:
Group 1 aeroplanes are those equipped with Bleed Monitoring Computer (BMC) software (SW) 4.0.

Group 2 aeroplanes are those equipped with BMC SW 4.1 standard.
Note 1: An aeroplane having Airbus modification (mod) 209292 or Airbus Service Bulletin (SB) A330-36-3050 embodied, and having neither Airbus mod 210504 nor Airbus SB A330-36-3055 embodied, is a Group 2 aeroplane, provided it remains in that configuration.

Group 3 aeroplanes are those equipped with BMC SW 5.0 or later approved SW standard.
Note 2: An aeroplane having Airbus mod 210504 or Airbus SB A330-36-3055 (at any revision) embodied is a Group 3 aeroplane, provided it remains in that configuration.

Reason:
Occurrences were reported of leaking HPV, due to HPV clip failure and sealing ring damage. A leaking HPV may expose the Pressure Regulating Valve (PRV), which is installed downstream from the HPV, to high pressure, possibly damaging the PRV itself and preventing its closure, when required.

This condition, if not detected and corrected, could lead to high pressure and temperatures in the duct downstream from the PRV, with possible duct burst, damage to several systems or airframe and consequently loss of control of the aeroplane.

Airbus issued Flight Operations Transmission (FOT) 999.0062/22 to provide advance information and instructions to operators, and EASA issued Emergency AD 2022-0170-E to require amending the applicable AFM and implementing dispatch restrictions. That AD also required reporting of specific maintenance messages to Airbus.

After that AD was issued, Airbus published AOT A36L009-22, the AFM-TR 811 and the MMEL update, providing additional instructions and maintenance procedures to address failures of the HPV, and EASA issued AD 2022-0181, superseding AD 2022-0170-E, to require accomplishment of maintenance actions, including repetitive replacement of the HPV clips; amendment of the applicable AFM; and implementation of the MMEL update.

After that AD was issued, Airbus issued AOT A36L009-22 rev. 01 to provide improved instructions (including a reduced list of 'Class 1 maintenance message associated to an HPV fault'), and comments had been received with regard to that AD. Consequently, EASA issued AD 2022-0227, partially retaining the requirements of EASA AD 2022-0181, which was superseded, and providing additional criteria for installation of HPV and HPV clips.

After that AD was issued, it has been determined that the interval for the HPV clip replacement must be based also on FC accumulated by the HPV clip, and additional instructions applicable depending on BMC SW configuration, have been identified. Airbus issued AOT A36L009-22 rev. 02 accordingly, also including improved maintenance instructions, and the AFM-TR 813 and revised FOT 999.0062/22.

EASA issued AD 2023-0111, retaining the requirements of EASA AD 2022-0227, which was superseded, providing additional criteria for the replacement of HPV clips and, depending on BMC SW configuration, requiring the accomplishment of additional instructions, in accordance with the instructions of AOT A36L009-22 rev. 02, as applicable.

After that AD was issued, the following items were released:
- Airbus mod 210504, introducing the BMC SW 5.0 standard. This SW supports improved monitoring features which allow a relaxation of the maintenance requirements, operational procedures and limitations;
- Airbus SB A330-36-3055 at original issue, providing retrofit instructions; and
- Airbus AOT A36L009-22 rev. 03, to specify the effectivity of its instructions depending on BMC SW installed.

EASA issued AD 2023-0111R1 accordingly.

Since that AD was issued:

- an improved HPV, P/N 71070A030001, introducing several design improvements, and equipped with clips which do not have to be replaced at predefined intervals, has been certified;
- Airbus SB A330-36-3057 has been issued, providing instructions to replace affected HPV with EBAS HPV P/N 71070A030001;
- the SB 3055R1 has been issued, including instructions for additional work for those aeroplanes on which Airbus A330-36-3055 has been embodied at original issue; and
- the OPV-MMEL content has been certified, introducing additional instructions for aeroplanes having BMC SW 4.0 or BMC SW 4.1 installed;

and it has been determined that:
- the BMC SW 5.0, referenced as optional modification in AD 2023-0111R1, must be mandatorily installed on Group 1 and Group 2 aeroplanes;
- the additional work as defined in the SB 3055R1, must be accomplished; and
- the OPV-MMEL content must be implemented for aeroplanes having BMC SW 4.0 or BMC SW 4.1 installed.

For the reason described above, this AD:
- retains the requirements of EASA AD 2023-0111R1, which is superseded;
- additionally requires installation of BMC SW 5.0;
- additionally requires accomplishment of the additional work as identified in the SB 3055R1; and,
- for aeroplanes having BMC SW 4.0 or BMC SW 4.1 installed, requires the implementation of the OPV-MMEL content.

This AD also clarifies that the replacement of HPV clips at predefined intervals is no longer required on newly designed HPV.

A correlation table between the requirements of EASA AD 2023-0111R1 and this Ad is provided in Appendix 1 of this AD for convenience.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Restatement of the Requirements of EASA AD 2023-0111R1

AFM Amendment:

(1) For Group 1 and Group 2 aeroplanes: Within 7 days after 05 September 2022 [the effective date of EASA AD 2022-0181], incorporate the AFM-TR 811 into the applicable AFM, inform all flight crews and, thereafter, operate the aeroplane accordingly.

(2) For Group 2 aeroplanes: Within 7 days after 02 June 2023 [the effective date of the original issue of EASA AD 2023-0111], incorporate the AFM-TR 813 into the applicable AFM, inform all flight crews and, thereafter, operate the aeroplane accordingly.

(3) For Group 1 aeroplanes: From 02 June 2023 [the effective date of the original issue of EASA AD 2023-0111], it is allowed to modify an aeroplane in accordance with the instructions of Airbus SB A330-36-3050, provided that, before next flight after that modification, the AFM-TR 813 is incorporated into the applicable AFM; thereafter, inform all flight crews and operate the aeroplane accordingly (see Note 3 of this AD).

Note 3: Following modification of an aeroplane in accordance with the instructions of Airbus SB A330-36-3050, that aeroplane is considered to be a Group 2 aeroplane.

(4) Concurrently with the AFM amendment as required by paragraph (1) of this AD, remove from the applicable AFM the additional limitations, previously inserted as required by paragraph (1) of EASA AD 2022-0181, as applicable.

(5) For Group 2 aeroplanes: Concurrently with the AFM amendment as required by paragraph (2) or (3) of this AD, as applicable, remove from the applicable AFM the additional limitations, previously inserted as required by paragraph (1) of EASA AD 2022-0181, and the AFM-TR 811, previously inserted as required by paragraph (1) of this AD, as applicable.

(6) Amending the applicable AFM by incorporating a later revision, which includes the AFM-TR 811 or the AFM-TR 813, as applicable, is an acceptable method to comply with the requirements of paragraphs (1) to (3), as applicable, of this AD.

(6.1) For Group 3 aeroplanes: From 28 May 2024 [the effective date of EASA AD 2023-0111R1], it is allowed to remove the AFM-TR 813 from the applicable AFM, as applicable (see Notes 4 and 5 of this AD).

Note 4: Following modification of an aeroplane in accordance with the instructions of Airbus SB A330-36-3055 (at any revision), that aeroplane is considered to be a Group 3 aeroplane.

Note 5: Modification of a Group 1 aeroplane in accordance with the instructions of Airbus SB A330-36-3055 (at any revision) is an alternative method to comply with the instructions of paragraph (3) of this AD for that aeroplane. Therefore, for that aeroplane, the additional limitations, previously inserted as required by paragraph (1) of EASA AD 2022-0181, and the AFM-TR 811, previously inserted as required by paragraph (1) of this AD, as applicable, must be removed from the applicable AFM as required by paragraph (5) of this AD.

MMEL Amendment:

(7) For Group 1 and Group 2 aeroplanes: Concurrently with the AFM amendment as required by paragraph (1) or (2) of this AD, as applicable, implement the instructions of the MMEL update, as defined in this AD, on the basis of which the operator's MEL must be amended, inform all flight crews, and thereafter, operate the aeroplane accordingly. Implementing the MMEL update for an aeroplane cancels the dispatch restrictions, as required by paragraph (2) of EASA AD 2022-0181, as applicable, for that aeroplane (see Note 6 of this AD).

Note 6**:** Amending the applicable AFM of an aeroplane by incorporating the AFM-TR 813 does not allow removal of the MMEL update as required by paragraph (7) of this AD for that aeroplane.

(7.1) For Group 1 and Group 2 aeroplanes: From 28 May 2024 [the effective date of EASA AD 2023-0111R1], modification of an aeroplane in accordance with the instructions of Airbus SB A330-36-3055 (at any revision) and implementation of the BMC SW 5.0 MMEL content (as defined in this AD) cancels the requirement to implement the instructions of the MMEL update(s) for that aeroplane, as defined in paragraphs (7) and (28) of this AD, and cancels the dispatch restrictions, as required by paragraph (2) of EASA AD 2022-0181, as applicable, for that aeroplane.

HPV Seal Integrity Test:

(8) For Group 1 and Group 2 aeroplanes: Before next flight after 05 September 2022 [the effective date of EASA AD 2022-0181], accomplish a Seal Integrity Test of each HPV in accordance with the instructions of the AOT.

(9) For Group 1 aeroplanes: Before an HPV accumulates 1 000 FH since first installation on an airplane, or within 1 000 FH after 02 June 2023 [the effective date of the original issue of EASA AD 2023-0111], whichever occurs later, and, thereafter, at intervals not to exceed 1 000 FH, accomplish a Seal Integrity Test of that HPV in accordance with the instructions of the AOT.

Additional Maintenance Instructions:

(10) For Group 1 and Group 2 aeroplanes: From 05 September 2022 [the effective date of EASA AD 2022-0181], before next flight after any Class 1 maintenance message associated to an HPV fault, as listed in the AOT, accomplish the HPV troubleshooting procedure and additional maintenance actions, as applicable, as identified in, and in accordance with the instructions of, the AOT.

(11) For Group 1 and Group 2 aeroplanes: From 05 September 2022 [the effective date of EASA AD 2022-0181], before next flight after any Class 1 or Class 2 maintenance message associated to a PRV fault, as listed in the AOT, accomplish the HPV seal integrity test and the additional maintenance actions, as applicable, as identified in, and in accordance with the instructions of, the AOT.

(12) For Group 1 and Group 2 aeroplanes: From 05 September 2022 [the effective date of EASA AD 2022-0181], before next flight after any failure of an HPV clip and/or any of the HPV butterfly sealing rings, visually inspect the EBAS in accordance with the instructions of the AOT.

(13) For Group 1 aeroplanes: After the AFM amendment, as required by paragraph (1) of this AD, before next flight after any take-off or go-around, accomplished with ‘packs OFF’, or ‘APU bleed ON’, or ‘engine bleed OFF’, accomplish a Seal Integrity Test of each HPV in accordance with the instructions of the AOT.

(14) For Group 2 aeroplanes: After the AFM amendment, as required by paragraph (2) or (3) of this AD, as applicable, within 10 FC after any take-off or go-around, accomplished with ‘packs OFF’, or ‘APU bleed ON’, or ‘engine bleed OFF’, accomplish a Seal Integrity Test of each HPV in accordance with the instructions of the AOT.

Corrective Action(s):

(15) For Group 1 and Group 2 aeroplanes: If, during the accomplishment of any action as required by paragraphs (8) to (14) of this AD, as applicable, any discrepancy is detected, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the AOT.

(16) For Group 1 and Group 2 aeroplanes: From 05 September 2022 [the effective date of EASA AD 2022-0181], if, during the first flight after any accomplishment of the HPV troubleshooting procedure, as identified in the AOT, any Class 1 maintenance message occurs associated to HPV fault as listed in the AOT, before next flight, contact Airbus for applicable instructions and accomplish those instructions accordingly.

HPV Clip Replacement:

(17) For Group 1, Group 2 and Group 3 aeroplanes: Within the compliance time as identified in Table 1 of this AD, and, thereafter, at intervals not to exceed 4 000 FH or 600 FC, whichever occurs first, replace each affected HPV clip of that affected HPV, as applicable, with a new (not previously installed on any HPV) affected HPV clip in accordance with the instructions of the AOT.

Table 1 – HPV Clip Replacement

	Compliance Time: A or B, whichever occurs first (see Note 7 of this AD)
A	Before exceeding 4 000 FH accumulated by an affected HPV clip since its installation on an affected HPV, or within 1 500 FH after 05 September 2022 [the effective date of EASA AD 2022-0181], whichever occurs later
B	(a) or (b), whichever occurs later (a) Before exceeding 600 FC accumulated by an affected HPV clip since its installation on an affected HPV (b) Within 60 days or 225 FC, whichever occurs first after 02 June 2023 [the effective date of the original issue of EASA AD 2023-0111]

Note 7: For the initial replacement only, if the FH accumulated by the HPV clips are not known, the FH and the FC accumulated by the affected HPV can be used instead.

Terminating Action(s):

(18) Modification of a Group 1 aeroplane in accordance with the instructions of Airbus SB A330-36-3050 constitutes terminating action for the repetitive HPV Seal Integrity Test as required by paragraph (9) of this AD for that aeroplane (see Notes 3 and 5 of this AD).

Note 8: [CANCELLED].

Part(s) Installation:

(19) For Group 1, Group 2 and Group 3 aeroplanes: From 08 December 2022 [the effective date of EASA AD 2022-0227], it is allowed to install affected HPV clips on an aeroplane (see Note 9),

provided they are new affected HPV clips and that, following installation, they are replaced in accordance with the instructions of the AOT before exceeding 4 000 FH or 600 FC, whichever occurs first since their installation on an affected HPV.

Note 9: Affected HPV clips are eligible for installation on affected HPV only. On the effective date of this AD, no approved instructions have been published to install an affected HPV Clip to an EBAS HPV other than P/N 71070A010001 or P/N 71070A020001.

(20) For Group 1, Group 2 and Group 3 aeroplanes: From 02 June 2023 [the effective date of the original issue of EASA AD 2023-0111], it is allowed to install an affected HPV on an aeroplane, provided it is a serviceable HPV and that, following installation, the affected HPV clips of that HPV are replaced as required by paragraph (17) of this AD.

Credit:

(21) Maintenance actions accomplished before 08 December 2022 [the effective date of EASA AD 2022-0227] in accordance with the instructions of AOT A36L009-22 original issue are acceptable to comply with the requirements of this AD, as applicable.

(22) Maintenance actions accomplished before 02 June 2023 [the effective date of the original issue of EASA AD 2023-0111] in accordance with the instructions of AOT A36L009-22 Revision 01 are acceptable to comply with the requirements of this AD, as applicable.

Reporting:

(23) [CANCELLED].

New Requirements of this AD:

Modification:

(24) For Group 1 and Group 2 aeroplanes: Within 12 months after the effective date of this AD, modify the aeroplane by installing BMC SW 5.0 in accordance with the instructions of the SB 3055R1 (see also paragraphs (6.1), (7.1) and Note 5 of this AD).

(25) For Group 3 aeroplanes, having embodied Airbus SB A330-36-3055 at original issue: Within 12 months after the effective date of this AD, accomplish the additional work as identified in, and in accordance with the instructions of, the SB 3055R1.

(26) Installation on an aeroplane of BMC SW at revision later than 5.0 in accordance with Airbus instructions constitutes an acceptable method to comply with the requirements of paragraphs (24) and (25) of this AD, as applicable, for that aeroplane.

Part(s) Installation:

(27) Do not install BMC SW 4.0 or BMC SW 4.1 on any aeroplane, as required by paragraph (27.1) or (27.2) of this AD, as applicable:

(27.1) For Group 1 and Group 2 aeroplanes: After modification of the aeroplane as required by paragraph (24) of this AD.

(27.2) For Group 3 aeroplanes: From the effective date of this AD.

MMEL Amendment:

(28) For Group 1 and Group 2 aeroplanes: Within 30 days after the effective date of this AD, implement the instructions of the OPV-MMEL content, as defined in this AD, on the basis of which the operator's MEL must be amended, inform all flight crews, and thereafter, operate the aeroplane accordingly.

Terminating Action(s):

(29) For Group 1, Group 2 and Group 3 aeroplanes: Modification of both EBAS HPV (see Note 10) of an aeroplane in accordance with the instructions of Airbus SB A330-36-3057 constitutes terminating action for the HPV clip replacement as required by paragraph (17) of this AD for that aeroplane, provided, thereafter, no affected HPV are re-installed on that aeroplane.

The requirements of paragraphs (8) to (16) of this AD are still effective, as applicable, for a Group 1 or Group 2 aeroplane which has been modified in accordance with the instructions of Airbus SB A330-36-3057.

Note 10: Airbus A330-36-3057 can be accomplished at different times for the two EBAS HPV of an aeroplane. For aeroplanes having a mixed configuration (different EBAS HPV P/N installed), the HPV clip replacement, as required by paragraph (17) of this AD, is applicable only for Affected HPV.

Ref. Publications:

Airbus AOT A36L009-22 original issue dated 25 August 2022, Revision 01 dated 03 October 2022, Revision 02 dated 15 May 2023 or Revision 03 dated 24 April 2024.

Airbus AFM-TR 811 issue 1, EASA approval date 25 August 2022.

Airbus AFM-TR 813 issue 1, EASA approval date 10 May 2023.

Airbus SB A330-36-3055 original issue dated 31 May 2024, and revision 1 dated 14 November 2024.

Airbus SB A330-36-3057 original issue dated 28 October 2024.

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

Airbus A330/A340 MMEL MER dated 25 August 2022.

Airbus A330/340 MMEL MER dated 10 February 2025.

Remarks:

1. This Proposed AD will be closed for consultation on 23 April 2025.

2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred

on a product, part or appliance not affected by this PAD, 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 PAD 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.

4. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – 1IAL (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.

Appendix 1
Correlation Table
AD 2023-0111R1 to PAD 25-055

Paragraphs and Notes of EASA AD 2023-0111R1	**Paragraphs and Notes of EASA PAD 25-055**	**Delta**
1, 2, 3, 4, 5, 6, 6.1 (including Notes 3, 4 and 5)	1, 2, 3, 4, 5, 6, 6.1 (including Notes 3, 4 and 5)	Editorial
7 (including Note 6)	7 (including Note 6)	None
7.1	7.1	Updated
8, 10, 11, 12, 13, 14, 15, 16	8, 10, 11, 12, 13, 14, 15, 16	None
9	9	Editorial
17 (including Note 7)	17 (including Note 7)	Updated
18	18	None
Note 8	Note 8	Cancelled
19	19	Updated
n/a	Note 9	New
20	20	Updated
21	21	None
22	22	Editorial
23	23	Cancelled
n/a	24, 25, 26, 27, 29, 29 and Note 10	New