



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 18-004

Issued: 15 January 2018

Note: This Proposed Airworthiness Directive (PAD) 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.

In 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

Type/Model designation(s):

A318, A319, A320 and A321 aeroplanes

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

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2017-0257R1 dated 09 January 2018.

ATA 34 – Navigation – Back Up Speed Scale / Aircraft Flight Manual – Amendment

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A320-251N, A320-271N, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers that have Airbus modification (mod) 35871 embodied in production, or Airbus Service Bulletin (SB) A320-34-1397 or SB A320-34-1543 in service (introducing Air Data Monitoring and BUSS function), except aeroplanes which have also embodied Airbus mod 159281 in production, or Airbus SB A320-34-1658 or SB A320-34-1659 in service (installing reversible BUSS function).

Reason:

In extreme icing conditions, pitot probes may induce erroneous airspeed indications. To provide flight crews with reliable information on airspeed, Airbus developed a Back-up Speed Scale (BUSS and reversible BUSS, based on angle of attack (AoA) value) displayed on the Primary Flight Display (PFD), together with a PFD Back-Up Altitude Scale based on Global Positioning System (GPS) altitude. This BUSS function is intended to be used below flight level (FL) 250 only (above FL250, the



BUSS is disconnected). Following new investigation related to AoA probes blockages, it was identified that, when two AoA sensors are adversely affected by icing conditions at the same time, data displayed on the BUSS could be erroneous.

This condition, if not corrected, could lead to an increased flight crew workload, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Airbus established specific operational instructions to be applied by the flight crew under certain defined conditions. The relevant procedure was incorporated into the applicable A320 family Airplane Flight Manual (AFM) since 07 March 2017 (publication date). Consequently, EASA issued AD 2017-0257 (later revised) to require a one-time AFM amendment to introduce the additional operational procedure.

Since EASA AD 2017-0257R1 was issued, it was determined that aeroplanes on which Airbus SB A320-34-1543 (mod 154033) was embodied in service were inadvertently missing from the Applicability of the AD.

For the reason described above, this AD retains the requirements of EASA AD 2017-0257R1, which is superseded, and extends the Applicability to aeroplanes that embody Airbus SB A320-34-1543. This AD also allows removal of the AFM amendment, where it was mistakenly inserted in the AFM of an aeroplane not equipped with the BUSS function, prompted by the Applicability definition and requirements of EASA AD 2017-0257 at original issue.

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

Required as indicated, unless accomplished previously:

AFM Amendment:

- (1) Within the compliance time specified in Table 1 of this AD, amend the applicable AFM by incorporating the procedure as specified in Appendix 1 of this AD, inform all flight crews, and, thereafter, operate the aeroplane accordingly.

Table 1 – AFM Amendment

Aeroplane Configuration	Compliance Time
Airbus mod 35871 embodied in production or Airbus SB A320-34-1397 embodied in service	Within 30 days after 29 December 2017 [the effective date of EASA AD 2017-0257 at original issue]
Airbus SB A320-34-1543 embodied in service	Within 30 days after the effective date of this AD

- (2) Amending the applicable AFM of an aeroplane to incorporate a later AFM revision, which includes the procedure as specified in Appendix 1 of this AD, is acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane.
- (3) For aeroplanes which are no longer part of the Applicability of this AD, compared to the Applicability defined in EASA AD 2017-0257 at original issue, but which have amended the AFM



as previously required by that AD, the AFM amendment may be removed from the AFM of that aeroplane.

Credit:

- (4) Aeroplanes operated with an AFM having the NAV – ADR 1+2+3 FAULT procedure with an approval date on or after 02 March 2017 are compliant with the requirements of this AD.

Ref. Publications:

Airbus A318, A319, A320 and A321 AFM Revision dated 07 March 2017.


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

Remarks:

1. This Proposed AD will be closed for consultation on 12 February 2018.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – Airworthiness Office – EIAS; Fax +33 5 61 93 44 51;
E-mail: account.airworth-eas@airbus.com.



Appendix 1 – AFM Procedure

 AIRBUS A318/A319/A320/A321 AIRPLANE FLIGHT MANUAL	EMERGENCY PROCEDURES NAVIGATION
	NAV - ADR 1+2+3 FAULT
Ident.: EMER-34-00007047.0001001 / 02 MAR 17 Criteria: (SA and (154033 or 35871)) Impacted by TDU: 00014228 NAV - ADR 1+2+3 FAULT	
APPROVED	

¹ **Note:** *Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).*

Disconnect autopilot.
 Turn off flight directors.
 Disconnect autothrust.
 Turn off all ADRs.
 Fly the green area of the speed scale.

Note:

1. Standby instruments may be unreliable.
2. The altitude displayed on the PFD is a GPS altitude.
3. Automatic cabin pressurization system is inoperative. Refer to ABN-21 CAB PR - SYS 1 + 2 FAULT.
4. Rudder travel limiter is inoperative. Refer to ABN-22-AUTOFLT AUTO FLT - RUD TRV LIM SYS.
5. If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and adjust pitch attitude and thrust regarding flight phase and aircraft configuration to obtain and maintain target.

Do not use speed brakes.
 Maneuver with care.

● **When FLAPS 2:**

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

Approach speed: fly the bug.
 Apply necessary landing performance corrections.


ALL A318/A319/A320/A321
 AFM

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Appendix 1 – AFM Procedure (continued)

 AIRBUS A318/A319/A320/A321 AIRPLANE FLIGHT MANUAL	EMERGENCY PROCEDURES NAVIGATION
	NAV - ADR 1+2+3 FAULT
Ident.: EMER-34-00007047.0005001 / 02 MAR 17 Criteria: (SA and ((154033 or 35871) and 151269)) Impacted by TDU: 00014228 NAV - ADR 1+2+3 FAULT	
APPROVED	

2

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Disconnect autopilot.
 Turn off flight directors.
 Disconnect autothrust.
 Turn on probe and window heat.
 Turn off all ADRs.
 Fly the green area of the speed scale.

Note:

1. Standby instruments may be unreliable.
2. The altitude displayed on the PFD is a GPS altitude.
3. Automatic cabin pressurization system is inoperative. Refer to ABN-21 CAB PR - SYS 1 + 2 FAULT.
4. Rudder travel limiter is inoperative. Refer to ABN-22-AUTOFLT AUTO FLT - RUD TRV LIM SYS.
5. If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and adjust pitch attitude and thrust regarding flight phase and aircraft configuration to obtain and maintain target.

Do not use speed brakes.
 Maneuver with care.

● **When FLAPS 2:**

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

Approach speed: fly the bug.
 Apply necessary landing performance corrections.


ALL A318/A319/A320/A321
 AFM

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Appendix 1 – AFM Procedure (continued)

 AIRBUS A318/A319/A320/A321 AIRPLANE FLIGHT MANUAL	EMERGENCY PROCEDURES NAVIGATION
	NAV - ADR 1+2+3 FAULT
Ident.: EMER-34-00007047.0003001 / 02 MAR 17 Criteria: (SA and ((154033 or 35871) and 38298)) Impacted by TDU: 00014228 NAV - ADR 1+2+3 FAULT	
APPROVED	

³ **Note:** *Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).*

Disconnect autopilot.
 Turn off flight directors.
 Disconnect autothrust.
 Turn off all ADRs.
 Fly the green area of the speed scale.

Note:

1. When FLAPS 0, flight controls are in direct law. Refer to ABN-27 F/CTL - DIRECT LAW (PROT LOST).
2. Standby instruments may be unreliable.
3. The altitude displayed on the PFD is a GPS altitude.
4. Automatic cabin pressurization system is inoperative. Refer to ABN-21 CAB PR - SYS 1 + 2 FAULT.
5. Rudder travel limiter is inoperative. Refer to ABN-22-AUTOFLT AUTO FLT - RUD TRV LIM SYS.
6. If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and adjust pitch attitude and thrust regarding flight phase and aircraft configuration to obtain and maintain target.

Do not use speed brakes.
 Maneuver with care.

● **When FLAPS 2:**

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

Approach speed: fly the bug.
 Apply necessary landing performance corrections.


ALL A318/A319/A320/A321
 AFM

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Appendix 1 – AFM Procedure (end)

 A318/A319/A320/A321 AIRPLANE FLIGHT MANUAL	EMERGENCY PROCEDURES NAVIGATION
NAV - ADR 1+2+3 FAULT	
Ident.: EMER-34-00007047.0006001 / 02 MAR 17 APPROVED Criteria: ((SA and ((154033 or 35871) and 38298 and 151269)) or 320-200N) Impacted by TDU: 00014228 NAV - ADR 1+2+3 FAULT	

⁴ Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Disconnect autopilot.
 Turn off flight directors.
 Disconnect autothrust.
 Turn on probe and window heat.
 Turn off all ADRs.
 Fly the green area of the speed scale.

Note:

1. When FLAPS 0, flight controls are in direct law. Refer to ABN-27 F/CTL - DIRECT LAW (PROT LOST).
2. Standby instruments may be unreliable.
3. The altitude displayed on the PFD is a GPS altitude.
4. Automatic cabin pressurization system is inoperative. Refer to ABN-21 CAB PR - SYS 1 + 2 FAULT.
5. Rudder travel limiter is inoperative. Refer to ABN-22-AUTOFLT AUTO FLT - RUD TRV LIM SYS.
6. If the BUSS does not react to longitudinal stick input when flying the green area of the speed scale, the flight crew must disregard the BUSS and adjust pitch attitude and thrust regarding flight phase and aircraft configuration to obtain and maintain target.

Do not use speed brakes.
 Maneuver with care.

● **When FLAPS 2:**

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

Approach speed: fly the bug.
 Apply necessary landing performance corrections.

ALL A318/A319/A320/A321
 AFM

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