

Airworthiness Directive

AD No.: 2017-0257R1

Issued: 09 January 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:

Type/Model designation(s):

AIRBUS A318, A319, A320 and A321 aeroplanes

Effective Date: Revision 1: 09 January 2018

Original issue: 29 December 2017

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2017-0257 dated 22 December 2017.

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 received Airbus modification (mod) 35871 in production or Airbus Service Bulletin (SB) A320-34-1397 in service (introducing Air Data Monitoring and BUSS function), except aeroplanes which have also received Airbus mod 159281 in production, or Airbus SB A320-34-1658 or A320-34-1659 in service (installing reversible BUSS function).

Reason:

In extreme icing conditions, pitot probes may induce erroneous airspeed indications. 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, to provide flight crews with reliable information on airspeed. This BUSS 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 has been incorporated into the applicable A320 family Airplane Flight Manual (AFM) since 07 March 2017 (publication date).

For the reason described above, this AD requires a one-time AFM amendment to introduce the additional operational procedure.

After EASA AD 2017-0257 was issued, an error was detected in the Applicability, which should have been limited to aeroplanes equipped with the BUSS function.

This AD is therefore revised to correct the Applicability. The wording of the Reason and Credit paragraphs have also been improved and the original AFM pages have been inserted in the Appendix.

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

Required as indicated, unless accomplished previously:

AFM Amendment:

- (1) Within 30 days after 29 December 2017 [the effective date of the original issue 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.
- (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.

Credit:

(3) 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. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.



2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.

- 3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
- 4. 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.



Appendix 1 – AFM Procedure



EMERGENCY PROCEDURES NAVIGATION

A318/A319/A320/A321 AIRPLANE FLIGHT MANUAL

NAV - ADR 1+2+3 FAULT

Ident.: EMER-34-00007047.0001001 / 02 MAR 17

APPROVED

Criteria: (SA and (154033 or 35871))
Impacted by TDU: 00014228 NAV - ADR 1+2+3 FAULT

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.

Vote:

- 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 EMER-34 P 5/10 AFM $C \rightarrow$ 07 MAR 17

Appendix 1 - AFM Procedure (continued)



EMERGENCY PROCEDURES NAVIGATION

A318/A319/A320/A321 AIRPLANE FLIGHT MANUAL

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

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.

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

EMER-34 P 6/10 07 MAR 17



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Appendix 1 - AFM Procedure (continued)



EMERGENCY PROCEDURES NAVIGATION

AIRPLANE FEIGHT MANOAL

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

<u>Note:</u> 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.

<u>ivote:</u>

- 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.
- 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 EMER-34 P 7/10 AFM \leftarrow C \rightarrow 07 MAR 17



Appendix 1 - AFM Procedure (end)



EMERGENCY PROCEDURES NAVIGATION

A318/A319/A320/A321 AIRPLANE FLIGHT MANUAL

NAV - ADR 1+2+3 FAULT

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

Ident.: EMER-34-00007047.0006001 / 02 MAR 17 Criteria: ((SA and ((154033 or 35871) and 38298 and 151269)) or 320-200N) Impacted by TDU: 00014228 NAV - ADR 1+2+3 FAULT APPROVED

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.
 - 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 EMER-34 P 8/10
AFM ← C → 07 MAR 17

