

# 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:** AIRBUS

Type/Model designation(s). A318, A319, A320 and A321 aeroplanes

Effective Date:	Revision 1: 09 January 2018 Original issue: 29 December 2017	AC
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: <u>ADs@easa.europa.eu</u>.
- 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: <u>account.airworth-eas@airbus.com</u>.



# Appendix 1 – AFM Procedure

	IRBUS		
	<b>319/A320/A321</b> Ne flight Manual	NAVIGATION	
		NAV - ADR 1+2+3 FAULT	
riteria: (SA a	<b>34-00007047.0001001 / 02</b> nd (154033 or 35871)) DU: 00014228 NAV - ADR		
<u>Note:</u>	Flight controls are	n alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).	
Turn of Disconi Turn of	nect autopilot. f flight directors. nect autothrust. f all ADRs. green area of the s	peed scale.	
<u>Note:</u>	<ol> <li>The altitude dis</li> <li>Automatic cabin</li> <li>+ 2 FAULT.</li> </ol>	ments may be unreliable. played on the PFD is a GPS altitude. n pressurization system is inoperative. Refer to ABN-21 CAB PR - SYS 1 imiter is inoperative. Refer to ABN-22-AUTOFLT AUTO FLT - RUD TRV	
	speed scale, th	es not react to longitudinal stick input when flying the green area of the e flight crew must disregard the BUSS and adjust pitch attitude and g flight phase and aircraft configuration to obtain and maintain target.	
	use speed brakes. ver with care.		
	en FLAPS 2: end landing gear by	y gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.	
	ch speed: fly the bu		

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# Appendix 1 – AFM Procedure (continued)

<b>AIRBUS</b>		ENCY PROCEDURES
AIRPLANE FLIGHT MANUAL		
	NAV - ADR 1+2+3 F/	AULT
Ident.: EMER-34-00007047.0005001 / 02 Criteria: (SA and ((154033 or 35871) and Impacted by TDU: 00014228 NAV - ADR	151269))	APPROVED
<sup>2</sup> <u>Note:</u> Flight controls are Disconnect autopilot. Turn off flight directors. Disconnect autothrust. Turn on probe and window Turn off all ADRs. Fly the green area of the sp	heat.	N-27 F/CTL - ALTN LAW (PROT LOST).
Note: 1. Standby instrum 2. The altitude disp 3. Automatic cabir + 2 FAULT. 4. Rudder travel lin LIM SYS. 5. If the BUSS doe speed scale, the	nents may be unreliable. olayed on the PFD is a GPS a pressurization system is inop niter is inoperative. Refer to A es not react to longitudinal stic e flight crew must disregard th	Ititude. Derative. Refer to ABN-21 CAB PR - SYS 1 IBN-22-AUTOFLT AUTO FLT - RUD TRV k input when flying the green area of the e BUSS and adjust pitch attitude and iguration to obtain and maintain target.
Do not use speed brakes. Maneuver with care. • When FLAPS 2:	gravity. Refer to ABN-32 L/G	
Approach speed: fly the bu Apply necessary landing pe		
ALL A318/A319/A320/A321 AFM	← C →	EMER-34 P 6/10 07 MAB 17

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# Appendix 1 – AFM Procedure (continued)

<b>GAIRBUS</b>		EMERGENCY PROCEDURES	
0		NAVIGATION	
	<b>319/A320/A321</b> Ne Flight Manual		
		NAV - ADR 1+2+3 FAULT	
Criteria: (SA a	-34-00007047.0003001 / 02 and ((154033 or 35871) and 3 FDU: 00014228 NAV - ADR	38298))	
Note:	Flight controls are	in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).	
Turn of Discon Turn of	nect autopilot. ff flight directors. nect autothrust. ff all ADRs. green area of the sp	eed scale.	
<u>Note:</u>	<ul> <li>(PROT LOST).</li> <li>2. Standby instrum</li> <li>3. The altitude disp</li> <li>4. Automatic cabin + 2 FAULT.</li> <li>5. Rudder travel lin LIM SYS.</li> <li>6. If the BUSS doe speed scale, the thrust regarding</li> </ul>	flight controls are in direct law. Refer to ABN-27 F/CTL - DIRECT LAW ents may be unreliable. played on the PFD is a GPS altitude. pressurization system is inoperative. Refer to ABN-21 CAB PR - SYS 1 niter is inoperative. Refer to ABN-22-AUTOFLT AUTO FLT - RUD TRV s not react to longitudinal stick input when flying the green area of the flight crew must disregard the BUSS and adjust pitch attitude and flight phase and aircraft configuration to obtain and maintain target.	
Maneu • Wł	use speed brakes. ver with care. <b>ten FLAPS 2:</b>	gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.	
Approa	ach speed: fly the bug		

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# Appendix 1 – AFM Procedure (end)

<b>GAIRBUS</b>	EMERGENCY PROCEDURES			
AINDUS	NAVIGATION			
A318/A319/A320/A321 AIRPLANE FLIGHT MANUAL				
	NAV - ADR 1+2+3 FAULT			
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				
<sup>4</sup> <u>Note:</u> Flight controls ar	re 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 Turn off all ADRs. Fly the green area of the s				
(PROT LOST) 2. Standby instru 3. The altitude di 4. Automatic cab + 2 FAULT. 5. Rudder travel LIM SYS. 6. If the BUSS de speed scale, to	0, flight controls are in direct law. Refer to ABN-27 F/C iments may be unreliable. isplayed on the PFD is a GPS altitude. in pressurization system is inoperative. Refer to ABN-2 limiter is inoperative. Refer to ABN-22-AUTOFLT AUTC pes not react to longitudinal stick input when flying the g he flight crew must disregard the BUSS and adjust pitcl ng flight phase and aircraft configuration to obtain and n	1 CAB PR - SYS 1 D FLT - RUD TRV green area of the h attitude and		
Do not use speed brakes. Maneuver with care.				
<ul> <li>When FLAPS 2: Extend landing gear b</li> </ul>	oy gravity. Refer to ABN-32 L/G GRAVITY EXTENSION	I.		
Approach speed: fly the b Apply necessary landing p	0			
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