# **EASA**

# **EMERGENCY AIRWORTHINESS DIRECTIVE**

#### AD No.: 2014-0266-E



## Date: 09 December 2014

Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, 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 EU 748/2012, Part 21.A.3B. In accordance with EC 2042/2003 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 [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

<b>Design Approval Holder's Name:</b> AIRBUS		<b>Type/Model designation(s):</b> A318, A319, A320 and A321 aeroplanes	
TCDS Number:	EASA.A.064		
Foreign AD:	ign AD: Not applicable		
Supersedure:	Supersedure: None		
ΑΤΑ	Airplane Flight Manual – Undue Activation of Alpha Protection – Emergency Procedure		
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, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers		
Reason:	An occurrence was reported where an Airbus A321 aeroplane encountered a blockage of two Angle Of Attack (AOA) probes during climb, leading to activation of the Alpha Protection (Alpha Prot) while the Mach number increased. The flight crew managed to regain full control and the flight landed uneventfully. When Alpha Prot is activated due to blocked AOA probes, the flight control laws order a continuous nose down pitch rate that, in a worst case scenario, cannot be stopped with backward sidestick inputs, even in the full backward position. If the Mach number increases during a nose down order, the AOA value of the		
	Alpha Prot will continue to decrease. As a result, the flight control laws will continue to order a nose down pitch rate, even if the speed is above minimum selectable speed, known as VLS.		
	This condition, if not corrected	ed, could result in loss of control of the aeroplane.	
		ition, Airbus have developed a specific Aircraft ure, which has been published in AFM Temporary	
	For the reasons described al applicable AFM.	pove, this AD requires amendment of the	

	This is considered to be an interim action and further AD action may follow.	
Effective Date:	11 December 2014	
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously:	
	(1) Before next flight after the effective date of this AD, amend the applicable AFM by inserting a copy of Airbus AFM A320 TR 502 "Abnormal V alpha Prot", issue 1.	
	Alternatively, amending the applicable AFM can be accomplished by inserting of a copy of Appendix 1 of this AD into the Section Emergency Procedures.	
	(2) Concurrent with the AFM amendment as required by paragraph (1) of this AD, inform all flight crews and, thereafter, operate the aeroplane accordingly.	
Ref. Publications:	Airbus AFM A320 TR 502 issue 1, EASA approved 05 December 2014.	
	The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.	
Remarks:	<ol> <li>If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> </ol>	
	<ol> <li>The results of the safety assessment have indicated the need for immediate publication and notification, without the full public consultation process.</li> </ol>	
	<ol> <li>Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u>.</li> </ol>	
	<ol> <li>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>.</li> </ol>	

## Appendix 1 – AFM Procedure

- At any time, with a speed above VLS, if the aircraft goes to a continuous nose down pitch rate that cannot be stopped with backward sidestick inputs, immediately: Keep on one ADR. Turn off two ADRs.
- If the Alpha Max strip (red) hides completely the Alpha Prot strip (black and amber) in a stabilized wings-level flight path (without an increase in load factor):

Keep on one ADR.

Turn off two ADRs.

In case of dispatch with one ADR inoperative, switch only one ADR to OFF.

CAUTION RISK OF ERRONEOUS DISPLAY OF THE VSW STRIP (RED AND BLACK)

Consider using the Flight Path Vector (FPV).

 If the Alpha Prot strip (black and amber) rapidly moves by more than 30 kt during flight maneuvers (with an increase in load factor), with AP ON and speed brakes retracted: Keep on one ADR.

Turn off two ADRs.

In case of dispatch with one ADR inoperative, switch only one ADR to OFF.

CAUTION RISK OF ERRONEOUS DISPLAY OF THE VSW STRIP (RED AND BLACK)

Consider using the Flight Path Vector (FPV).