EASA

EMERGENCY AIRWORTHINESS DIRECTIVE



AD No.: 2014-0267-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].

Design Approval Holder's Name: AIRBUS		Type/Model designation(s): A330 and A340 aeroplanes
TCDS Number:	EASA.A.004 and EASA.A.015	
Foreign AD:	Not applicable	
Supersedure: None		
ATA	Airplane Flight Manual – Undue Activation of Alpha Protection – Emergency Procedure	
Manufacturer(s):	Airbus (formerly Airbus Industrie)	
Applicability:	Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN). Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, A340-542, A340-642 and A340-643 aeroplanes, all MSN.	
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, could result in loss of control of the aeroplane. As the same systems are installed on A330 and A340 aeroplanes, to address	
	As the same systems are installed on A330 and A340 aeroplanes, to address this unsafe condition, Airbus have developed a specific Aircraft Flight Manual (AFM) procedures, which has been published in AFM Temporary Revision (TR)	

	N° 528 for A330 aeroplanes and AFM TR N° 529 for A340 aeroplanes, as applicable to aeroplane type and model. For the reasons described above, this AD requires amendment of the applicable AFM.	
	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 A330 TR 528 "Abnormal V alpha Prot", issue 1 or AFM A340 TR 529 "Abnormal V alpha Prot", issue 1, as applicable to aeroplane type and model.	
	Alternatively, amending the applicable AFM can be accomplished by inserting of a copy of Appendix 1 – AFM A330 Procedure of this AD or Appendix 2 – AFM A340 Procedure of this AD, as applicable to aeroplane type and model, 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 A330 TR 528 issue 1, EASA approved 05 December 2014.	
	Airbus AFM A340 TR 529 issue 1, EASA approved 05 December 2014.	
	The use of later approved revisions of these documents are acceptable for compliance with the requirements of this AD.	
Remarks:	If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.	
	The results of the safety assessment have indicated the need for immediate publication and notification, without the full public consultation process.	
	 Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 	
	For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAL; E-mail: airworthiness.A330-A340@airbus.com .	

Appendix 1 – AFM A330 Procedure

ABNORMAL V ALPHA PROT

Ident: TDU / EMER-34-00015960.0001001 / 05 DEC 14

EASA APPROVED

Criteria: A330 Impacted DU: NONE Belongs to TR528 Issue 1

> If the Alpha Prot strip (black and amber) completely and permanently hides the VLS strip (amber) in a stabilized wings-level flight path (without an increase in the 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)
AND RISK OF UNDUE STALL WARNING

Do not increase speed.

Consider using the Flight Path Vector (FPV).

Recover affected DU by using associated DMC switching.

When at or above safety altitude, level off.

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.

Appendix 2 – AFM A340 Procedure

ABNORMAL V ALPHA PROT

Ident.: TDU / EMER-34-00015962.0001001 / 05 DEC 14

EASA APPROVED

Criteria: A340 Impacted DU: NONE Belongs to TR529 Issue 1

> If the Alpha Prot strip (black and amber) completely and permanently hides the VLS strip (amber) in a stabilized wings-level flight path (without an increase in the 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)
AND RISK OF UNDUE STALL WARNING

Do not increase speed.

Consider using the Flight Path Vector (FPV).

Recover affected DU by using associated DMC switching.

When at or above safety altitude, level off.

 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.