

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2014-0050 Date: 05 March 2014 Note: This 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 aeroplanes
TCDS Number:	EASA.A.004
Foreign AD:	Not applicable
Supersedure:	None
ATA 22	Auto flight – Auto Pilot / Flight Director TCAS function – De-Activation
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 on which Airbus modification 57425 has been embodied in production or Airbus Service Bulletin (SB) A330-22-3119 has been embodied in service, except those on which Airbus modification 203125 has been embodied in production.
Reason:	During simulator sessions on Flight Guidance Envelope K2 validation, unexpected behaviour of the Auto Pilot (AP) / Flight Director (FD) TCAS function was experienced: - AP commanded excessive vertical speed when the AP in command was changed from AP1 to AP2 during the TCAS manoeuvre. - FD Excessive order during TCAS conflict resolution was provided on First Officer (F/O) side. This behaviour can occur only on A330 aeroplanes on which the AP/FD TCAS function is activated through production modification 57425 or Airbus SB A330-22-3119. Investigation results revealed that this situation was due to some real time computation issues that may lead slave Flight Management Guidance Envelope Computer (FMGEC) to compute an excessive TCAS conflict resolution order.

	This condition, if not corrected, could lead to an excessive pitch attitude, possibly resulting in an excessive vertical speed that could jeopardise the aeroplane safe flight. To address this potential unsafe condition, Airbus issued Alert Operators Transmission (AOT) A22L001-14 to provide instructions to de-activate the AP/FD TCAS function. For the reason described above, this AD requires de-activation of the AP/FD TCAS function. This AD is considered an interim measure and further AD action may follow.
Effective Date:	12 March 2014
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 15 days after the effective of this AD, modify the aeroplane by de-activating AP/FD TCAS function in accordance with the instructions of Airbus AOT A22L001-14. Note: Airbus will amend the applicable AFM and MMEL to invalidate the AP/FD TCAS procedure and dispatch conditions, respectively. In the meantime, Airbus issued Flight Operations Transmission (FOT) 999.0014/14 to inform operators and flight crews of the issuance of Airbus AOT A22L001-14, and to also provide operational recommendations. (2) Concurrent with de-activation of the AP/FD TCAS function as required by paragraph (1) of this AD, the Airplane Flight Manual (AFM) operational instructions and Master Minimum Equipment List (MMEL) items related to the AP/FD TCAS function become invalid. Pilots must be informed accordingly. This can be accomplished by inserting a copy of this AD or a copy of Airbus FOT 999.0014/14 into the applicable AFM or operator's Aircraft Operating Manual, and into the operator's approved MEL.
Ref. Publications:	Airbus AOT A22L001-14 dated 24 February 2014. Airbus FOT 999.0014/14 dated 24 February 2014. The use of later approved revisions of these documents 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 Safety Information Section, Executive Directorate, EASA. 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 – EIAL; E-mail: airworthiness.A330-A340@airbus.com.