## AD No.: 2013-0219 Date: 17 September 2013 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].

	Type/Model designation(s):  A330 and A\$40-200/-300 aeroplanes
TCDS Number:	EASA.A.004 and EASA.A.015
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2013-0076 dated 20 March 2013.
ATA 53	Fuselage – Trimmable Horizontal Stabilizer Support Struts – Inspection / Replacement
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), and Airbus A340-211, A340-212, A340-213, A340-311, A340-312 and A340-313 aeroplanes, all MSN.
Reason:	During scheduled maintenance on A330 aeroplanes, several Trimmable Horizontal Stabilizer (THS) support struts at frame (FR) 91 were found cracked at strut body ends.  The THS is supported and articulated at FR 91 by four struts to fix the hinges (Y-bolts) and keep the structural integrity in lateral direction.  Analysis revealed that cracks can reduce ability of the support struts to carry specified tension loads.  This condition, if not detected and corrected, could lead to the loss of all four THS support struts at FR91, which would make the remaining structure unable to carry limit loads, resulting in the loss of Horizontal Tail Plane.  A340-500/600 aeroplanes are not affected by this AD as different material is used on THS support struts.  To address this potentially unsafe condition, EASA issued AD 2013-0076 to require repetitive special detailed inspections of all 8 strut ends of the THS support located at FR91 in the tail cone and, depending on findings,

replacement of THS support struts. That AD also required, for aeroplanes on which Airbus Modification 203493 had not been embodied in production, and Airbus Service Bulletin (SB) A330-53-3204 or SB A340-53-4199, as applicable, has not been embodied in service, the installation of a clamping device on each support strut end to stop growth of possible cracks (Crack stopper function) in order to secure integrity of the struts.

Since issuance of EASA AD 2013-0076, it has been discovered that several aeroplanes are fitted with another strut configuration (SARMA Strut) than the TAC (Technical Airborne Components Industries) strut, which caused the other strut not to be considered. Consequently, Airbus revised Airbus SB A330-53-3206 or SB A340-53-4208, accordingly in order to add a one-time inspection for SARMA struts and in case of finding to replace it with a TAC strut and thereafter to accomplish repetitive inspections.

For the reasons described above, this AD retains the requirements of EASA AD 2013-0076, which is superseded, and requires accomplishment of the instructions as specified in the latest revision of each SB, as applicable.

This AD is considered an interim action, pending the development of a terminating action.

## Effective Date:

01 October 2013

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

Required as indicated, unless accomplished previously:

For the purpose of this AD, SARMA strut is a strut on which the diameter of the strut end is lower than 43 mm. All other struts are TAC.

(1) Within the compliance time specified in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 42 months or 20 000 flight hours (FH), whichever occurs first, accomplish a High Frequency Eddy Current (HFEC) inspection of all TAC strut ends of the THS support located at FR91 in the tail cone in accordance with the instructions of Airbus SB A330-53-3206 Revision 02, or SB A340-53-4208 Revision 02, as applicable to aeroplane type.

Table 1 - Initial inspection for TAC strut ends

A340 MSN	A330 MSN	Compliance Time
002 through 210 inclusive	012 through 209 inclusive	within 6 months after 03 April 2013 [the effective date of AD 2013-0076]
212 through 447 inclusive	211 through 422 inclusive	within 24 months after 03 April 2013 [the effective date of AD 2013-0076]
450 through 955 inclusive	423 and subsequent	within 36 months after 03 April 2013 [the effective date of AD 2013-0076], or since aeroplane first flight, whichever occurs later

For aeroplanes on which Airbus modification 203493 has been embodied in production, or Airbus SB A330-53-3204 or SB A340-53-4199, as applicable, has been embodied in service, remove the clamp from each strut end before accomplishing this inspection.

(2) Before next flight after any inspection as required by paragraph (1) of this AD, accomplish the corrective action(s), depending on the inspection results, as specified in Table 2 of this AD in accordance with the instructions of Airbus SB A330-53-3206 Revision 02 or SB A340-53-4208 Revision 02, as applicable to aeroplane type.

Table 2 – Actions after a TAC strut end inspection

Inspection results	Actions
No crack, or cracks within acceptable limits	Install or re-install clamps
Cracks outside acceptable limits	Replace strut(s) with TAC strut(s) and install clamps

(3) Within the compliance time specified in Table 3 of this AD, as applicable, accomplish a one-time HFEC inspection of all SARMA strut ends of the THS support located at FR91 in the tall cone in accordance with the instructions of Airbus SB A330-53-3206 Revision 02, or SB A340-53-4208 Revision 02, as applicable to aeroplane type.

Table 3 - Inspection for SARMA strut ends

A340 MSN	A330 MSN	Compliance Time
002 through 210 inclusive	012 through 209 inclusive	Not later than 03 October 2013
212 through 447 inclusive	211 through 422 inclusive	within 24 months after 03 April 2013
450 through 955 inclusive	423 and subsequent	within 36 months after 03 April 2013 or since aeroplane first flight, whichever occurs later

- (4) If, during the inspection as required by paragraph (3) of this AD, a crack on at least one structed is detected, before next flight, replace each cracked strut with TAC structions of Airbus SB A330-53-3206 Revision 02, or SB A340-53-4208 Revision 02, as applicable to aeroplane type.
- (5) Replacement of PHS struts on an aeroplane, as required by paragraph (2) and (4) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane.
- (6) Within 30 days after the initial inspection as required by paragraph (1) of this AD, or after the one-time inspection as required by paragraph (3) of this AD, as applicable, report the results of the inspection (including no discrepancies) to Airbus.
- (7) Inspections and corrective actions, accomplished before the effective date of this AD, in accordance with the instructions of Airbus SB A330-53-3206 at original issue or Revision 01 or SB A340-53-4208 at original issue or Revision 01, as applicable to aeroplane type, are acceptable to comply with the initial requirements of this AD. After the effective date of this AD, the repetitive inspections and applicable corrective actions must be accomplished in accordance with the instructions of Airbus SB A330-53-3206 Revision 02 or SB A340-53-4208 Revision 02, as applicable to aeroplane type.

## Ref. Publications:

Airbus SB A330-53-3204 original issue dated 07 February 2013, or Revision 01 dated 13 June 2013.

Airbus SB A330-53-3206 original issue dated 07 February 2013, or Revision 01 dated 10 June 2013, or Revision 02 dated 08 August 2013.

Airbus SB A340-53-4199 original issue dated 07 February 2013, or Revision 01

	dated 13 June 2013.	
	Airbus SB A340-53-4208 original issue dated 07 February 2013, or Revision 01 dated 10 June 2013, or Revision 02 dated 08 August 2013.	
	The use of later approved revisions of these documents is 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.	
	<ol> <li>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.</li> </ol>	
	<ol> <li>Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> </ol>	
	<ol> <li>For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAL; E-mail: <u>airworthiness.A330-A340@airbus.com</u></li> </ol>	

