

EASA	EMERGENCY AIRWORTHINESS DIRECTIVE
	AD No.: 2012-0046-E Date: 21 March 2012 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 EC 1702/2003, Part 21A.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 Approval Holder's Name : EUROCOPTER	Type/Model designation(s) : AS 332 helicopters
TCDS Number :	EASA.R.002
Foreign AD :	Not applicable
Supersedure :	None
ATA 53	Fuselage –Bottom Structure Longitudinal Beams Y350 – Inspection / Repair
Manufacturer(s):	Eurocopter (formerly EUROCOPTER France)
Applicability:	AS 332 C1 and AS 332 L1 helicopters, serial numbers as specified in Eurocopter AS332 Alert Service Bulletin (ASB) 01.00.81.
Reason:	Eurocopter recently found on the production line that non-conforming rivets have been installed on the Right Hand (RH) and Left Hand (LH) longitudinal beams Y350 of the bottom structure, between sections X4780 and X5295, on an AS332 helicopter. The investigation results showed that on a limited number of helicopters, although a production modification (OP 21132, 07 21432, OP 22383, 07 23587 or 07 26082) involving the replacement of the 3.2 mm diameter rivets with 4.8 mm diameter rivets was recorded in the helicopter documents, the actual replacement of the rivets had not been embodied on the fuselage. This condition, if not detected and corrected, leads to significant reduction in safety margins during sling operations and may over time cause failure of the web/flange assembly connections of the beams Y350, possibly resulting in loss of control of the helicopter. For the reasons described above, this Emergency AD, pending inspection of the helicopter structure and replacement of the rivets, prohibits flight for helicopters having accumulated more than 45 000 sling operation cycles and requires for the others to limit the use of the 3-ton sling to external loads of 2.28 tons maximum. In addition, this AD requires inspection and modification of the helicopters having logged less than 45 000 sling operation cycles and, in case of findings, to prohibit flight or sling operation until the rivets are replaced. The rivets replacement is also required for helicopters having never performed sling operation.

Effective Date:	23 March 2012
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) For helicopters having accumulated, on the effective date of this AD, 45 000 or more sling operation cycles, before next flight, accomplish the following actions concurrently: - Note: A single flight, not exceeding 10 flight hours (FH) is allowed to ferry the helicopter to a location where maintenance can be accomplished. (1.1) Inspect the rivets installed on the RH and LH longitudinal beams Y350 of the bottom structure in accordance with the instruction of the paragraphs 3.B.1 and 3.B.3 of Eurocopter AS332 ASB 01.00.81; and (1.2) Report any observed damage to Eurocopter and restore the condition of the helicopter in accordance with EUROCOPTER defined maintenance and/or repair solution; and (1.3) Replace the rivets of the RH and LH longitudinal beams Y350 of the bottom structure in accordance with the instruction of the paragraph 3.B.7 of Eurocopter AS332 ASB 01.00.81. (2) For all other helicopters, within 10 FH after the effective date of this AD, limit the use of the 3-ton sling to external loads of 2.28 tons maximum by temporarily affixing labels on the helicopter and amending its Rotorcraft Flight Manual (RFM) in accordance with the instructions of paragraph 3.B.2 of Eurocopter AS332 ASB 01.00.81. (3) For helicopters having accumulated, on the effective date of this AD, less than 45 000 sling operation cycles, after implementation of the sling limitation as required by paragraph (2) of this AD, within 100 FH after the effective date of this AD, comply with the requirement of paragraph (1.1) of this AD. (3.1) If, during the inspection as required by paragraph (3) of this AD, loose rivets or missing rivets or cracks are found, before next flight, comply with the requirements of paragraphs (1.2) and (1.3) of this AD. (3.2) If, during the inspection as required by paragraph (3) of this AD, rivet black mark is found, before next flight, prohibit sling operation by replacing labels and RFM amendment required by paragraph (2) of this AD, with other temporary labels and RFM amendment in accordance with the instructions of paragraph 3.B.4 of Eurocopter AS332 ASB 01.00.81; and before resuming sling operation, or within 24 months after the effective date of this AD, whichever occurs first, comply with the requirements of paragraphs (1.2) and (1.3) of this AD. (3.3) If, during the inspection as required by paragraph (3) of this AD, no rivet black marks or loose/missing rivets or cracks are found, within 24 months after the effective date of this AD, comply with the requirements of paragraph (1.3) of this AD. (4) For the helicopters having never performed sling operation before the effective date of this AD, after implementation of the sling limitation as required by paragraph (2) of this AD, within 24 months after the effective date of this AD, comply with the requirements of paragraph (1.3) of this AD. (5) After replacement of the rivets of the RH and LH longitudinal beams Y350 of the bottom structure, as required by paragraph (1.3) of this AD, the sling operation limitations as required by paragraphs (2) or (3.2) of this AD, as applicable, are cancelled, and the temporary labels and RFM amendment can be removed from the helicopter.

Ref. Publications:	Eurocopter AS332 ASB 01.00.81, Revision 0 dated 19 March 2012 The use of later approved revisions of this 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. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification. 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: EUROCOPTER (STD) – Aéroport de Marseille Provence, 13725 Marignane Cedex, France; telephone +33 (4) 12 85 97 97; facsimile +33 (4) 85 99 66; E-mail: Directive.technical-support@eurocopter.com.