

EASA	NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE
	PAD No.: 15-049 Date: 23 April 2015 Note: This Proposed Airworthiness Directive (PAD) 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.
In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below. All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation closing date indicated.	
Design Approval Holder's Name: AIRBUS HELICOPTERS	Type/Model designation(s): AS 332 and EC 225 helicopters
TCDS Number:	EASA.R.002
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA Emergency AD 2011-0189-E dated 29 September 2011.
ATA 53	Fuselage – Intermediate Gear Box Fairing – Inspection / Replacement
Manufacturer(s):	Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale)
Applicability:	AS 332 C, AS 332 C1, AS 332 L, AS 332 L1, AS 332 L2 and EC 225 LP helicopters, all serial numbers, if equipped with an Intermediate Gear Box (IGB) fairing Part Number (P/N) 332A24-0303-05XX or P/N 332A24-0303-06XX or P/N 332A081391.00 or P/N 332A081391.01.
Reason:	In 2005, an occurrence was reported involving detachment of the angle section of the IGB fairing. The affected angle section is originally riveted to the IGB fairing (the IGB fairing gutter). As a result, interference occurred between the IGB fairing and the tail rotor (TR) inclined drive shaft. This condition, if not detected and corrected, could lead to failure of the TR drive shaft, resulting in loss of the TR drive and consequent reduced control of the helicopter. To address this potential unsafe situation, DGAC France issued Emergency (Urgent) AD UF-2005-116 (EASA approval ref. 2005-6055 – initially EASA.R.AD.01002), which was later revised, to require a one-time inspection. Prompted by a new occurrence of gutter separation, EASA issued Emergency AD 2007-0090-E, superseding DGAC France AD F-2005-116R1 (EASA approval ref. 2005-6143), to require repetitive inspections of the gutter riveting on the IGB fairing and, depending on findings, corrective action(s). After EASA AD 2007-0090-E was issued, a total separation of the gutter occurred again which also involved interference with the TR inclined drive shaft.

	That case revealed more severe deficiencies affecting gutter riveting. Consequently, EASA issued Emergency AD 2008-0219-E, superseding EASA AD 2007-0090-E, to require more extensive repetitive inspections of the IGB fairing gutter and introducing an optional terminating action for reinforcement of the gutter riveting on the IGB fairing. After EASA AD 2008-0219-E was issued, cracks were reportedly detected on the gutter of some helicopters that incorporated the optional gutter reinforcement modification. Consequently, EASA published Emergency AD 2009-0275-E, superseding EASA AD 2008-0219-E, to re-establish the repetitive inspections of the IGB fairing gutter for all helicopters, irrespective of modification status, and to reduce the inspection interval. While inspections of AD 2009-0275-E were effective, further gutter cracks occurred, leading to supersedure of this AD by EASA AD 2011-0129-E to retain repetitive inspections for cracks and interferences, and additionally require removal of the gutter from the IGB fairing. After EASA AD 2011-0129-E was issued, new occurrences were reported of finding cracks affecting the IGB fairing and its associated attachment supports. These cracks occurred after removal of the affected gutter. Prompted by these new occurrences, EASA issued Emergency AD 2011-0189-E to require additional inspections of the IGB fairing and its attachment supports and cancelled the requirement of gutter removal. Since EASA AD 2011-0189-E was issued, Airbus Helicopters have developed a new IGB fairing, P/N 332A24-0322-00, which is a one-piece full composite part that integrates a gutter. This modification is available for in-service application through AS332 Service Bulletin (SB) 53.01.78 or EC225 SB 53-041. For the reason described above, this AD retains the requirements of EASA AD 2011-0189-E, which is superseded, and requires installation of the new composite IGB fairing, which constitutes terminating action for the repetitive inspections.
Effective Date:	[TBD: 14 days after final AD issue date]
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) For helicopters equipped with an IGB fairing with gutter (fairing P/N 332A24-0303-05XX or P/N 332A24-0303-06XX), within 15 flight hours (FH) after 03 October 2011 [the effective date of EASA AD 2011-0189-E], and thereafter at intervals not to exceed 15 FH, inspect the gutter for cracks and inspect the condition of the IGB fairing and its attachment supports in accordance with the instructions of paragraphs 2.B.1 and 2.B.4 of Airbus Helicopters AS332 ASB 53.01.47 Revision 5 or EC225 ASB 53A001 Revision 5, as applicable to helicopter model. (2) For helicopters equipped with an IGB fairing without gutter (fairing P/N 332A08-1391-00 or P/N 332A08-1391-01), within 15 FH after 03 October 2011 [the effective date of EASA AD 2011-0189-E], and thereafter at intervals not to exceed 15 FH, inspect the condition of the IGB fairing and its attachment supports in accordance with the instructions of paragraph 2.B.4 of Airbus Helicopters AS332 ASB 53.01.47 Revision 5 or EC225 ASB 53A001 Revision 5, as applicable to helicopter model. (3) If, during any inspection as required by paragraph (1) or (2) of this AD, any discrepancy is detected, as defined in Airbus Helicopters AS332 ASB 53.01.47 Revision 5, or EC225 ASB 53A001 Revision 5, before next flight, accomplish the applicable corrective actions (depending on findings) in accordance with the instructions of paragraphs 2.B.3 and 2.B.4 of Airbus Helicopters AS332 ASB 53.01.47 Revision 5 or EC225 ASB 53A001 Revision 5, as applicable to helicopter model and modify the helicopter by installing composite IGB fairing P/N 332A24-0322-00 in accordance with

	Airbus Helicopters SB AS332 SB 53.01.78 or EC225 SB 53-041, as applicable to helicopter model. (4) Inspections and corrective actions, accomplished before the effective date of this AD, in accordance with Airbus Helicopters AS332 ASB 53.01.47 Revision 4 or EC225 ASB 53A001 Revision 4 are acceptable to comply with requirements as specified by paragraph (1) or (2) of this AD. Replacement of the IGB fairing accomplished in accordance with Airbus Helicopters AS332 ASB 53.01.47 Revision 4 or EC225 ASB 53A001 Revision 4 does not constitute terminating action for the repetitive inspections required by this AD. (5) Unless accomplished as required by paragraph (3) of this AD, within 31 months after the effective date of this AD, modify the helicopter by installing composite IGB fairing P/N 332A24-0322-00 in accordance with Airbus Helicopters AS332 SB 53.01.78 or EC225 SB 53-041, as applicable to helicopter model. (6) Modification of a helicopter by installing of a composite IGB fairing P/N 332A24-0322-00 in accordance with AS332 ASB 53.01.78 or EC225 SB 53-041, as applicable to helicopter model, as required by paragraph (3) of this AD, or as required by paragraph (5) of this AD, constitutes terminating action for the repetitive inspections required by this AD for that helicopter. (7) After modification of a helicopter as required by paragraph (3) or (5) of this AD, as applicable, do not install any IGB fairing having P/N 332A24-0303-05XX or P/N 332A24-0303-06XX or P/N 332A081391.00 or 332A081391.01 on that helicopter.
Ref. Publications:	Airbus Helicopters AS332 ASB 53.01.47 Revision 5 dated 09 March 2015, Airbus Helicopters AS332 SB 53.01.78 original issue dated 09 March 2015, Airbus Helicopters EC225 ASB 53A001 Revision 5 dated 09 March 2015, Airbus Helicopters EC225 SB 53-041 original issue 09 March 2015. The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks:	1. This Proposed AD will be closed for consultation on 21 May 2015. 2. Enquiries regarding this PAD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 3. For any question concerning the technical content of the requirements in this PAD, please contact: Airbus Helicopters (EBSESB) – Aéroport de Marseille Provence 13725 Marignane Cedex, France; Telephone +33 (4) 42 85 97 97; Fax +33 (4) 42 85 99 66; E-mail: Directive.technical-support@airbus.com.