### EASA

# **AIRWORTHINESS DIRECTIVE**

#### AD No.: 2013-0281R1

#### Date: 30 January 2015

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 EU 1321/2014 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 [EU 1321/2014 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 HELICOPTERS

#### Type/Model designation(s) :

AS 350 and AS 355 helicopters

TCDS Numbers: EASA.R.008, EASA.R.146

Foreign AD: Not applicable

Revision:

This AD revises EASA AD 2013-0281 dated 27 November 2013, which superseded EASA AD 2011-0244-E dated 22 December 2011.

ATA 33	Lights – Position Strobe Light – Inspection / Deactivation / Modification

Manufacturer(s):	Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale)
Applicability:	AS 350 B, AS 350 BA, AS 350 BB, AS 350 B1, AS 350 B2, AS 350 B3 and AS 350 D helicopters, all serial numbers (s/n), and AS 355 E, AS 355 F, AS 355 F1, AS 355 F2, AS 355 N and AS 355 NP helicopters, all s/n, if modified in production with (optional) modification OP0811 and equipped with a Grimes-Honeywell power supply unit, Part Number (P/N) 60-1431-3, in the baggage compartment as part of that optional modification, except helicopters that have embodied at least one of the modifications as listed in Appendix1 of this AD.
Reason:	An occurrence was reported where the pilot of an AS 350 B3 helicopter detected smoke coming from the baggage compartment. As a precaution, an emergency landing was executed, during which no personal injuries were sustained, but the helicopter was lost due to the ensuing fire.
	The results of the initial investigation are inconclusive regarding the exact cause(s) of the fire. However, deteriorating insulation of the strobe light power supply wiring and insufficient strength of the attachments are suspected to have been contributing factors.
	This condition, if not detected and corrected, can cause spark emission which, in combination with the carriage of certain cargo, could lead to an uncontrolled fire in the baggage compartment, possibly resulting in loss of the helicopter.
	To address this potential unsafe condition, EASA issued Emergency AD 2011-0244-E to require, as an interim action, deactivation of the position strobe light system, or repetitive inspections of the position strobe light power supply installation and, depending on findings, applicable corrective actions.

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		Since that AD was issued, Airbus Helicopters developed a modification which provides terminating action for the repetitive inspections, and allows any deactivated systems to be activated again.
		For the reasons described above, this AD retains the requirements of EASA AD 2011-0244-E, which is superseded, and requires, as terminating action, installation of a protector assembly on the wiring and on the power supply unit of the position strobe light installation.
		This AD is revised to exclude helicopters that embody at least one of the modification listed in Appendix 1 of this AD.
İ	Effective Date:	Revision 1: 13 February 2015
		Original: 11 December 2013
	Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously:
		Re-statement of EASA AD 2011-0244-E requirements:
		(1) Within 10 flight hours (FH) after 23 December 2011 (the effective date of EASA AD 2011-0244-E) and, thereafter, at intervals not to exceed 165 FH or 13 months, whichever occurs first, visually inspect the wiring and the power supply unit in the baggage compartment in accordance with the instructions of Eurocopter AS350 Alert Service Bulletin (ASB) No. 05.00.66, or AS355 ASB No. 05.00.60, as applicable to helicopter type.
		(2) Before the first flight of the day after the initial inspection as required by paragraph (1) of this AD and, thereafter, before each first flight of the day, visually inspect the wiring of the position strobe light installation in the baggage compartment in accordance with the instructions of Eurocopter AS350 ASB No. 05.00.66, or AS355 ASB No. 05.00.60, as applicable to helicopter type.
		(3) In addition to the repetitive inspections as required by paragraphs (1) and (2) of this AD, within 110 FH or 3 months, whichever occurs first after 23 December 2011 (the effective date of EASA AD 2011-0244-E), and, thereafter, at intervals not to exceed 165 FH or 13 months, whichever occurs first, measure the wiring insulation and verify the mechanical strength of the connectors in accordance with the instructions of Eurocopter AS350 ASB No.05.00.66, or AS355 ASB No. 05.00.60, as applicable to helicopter type.
		(4) If, during any inspection as required by paragraph (1), (2) or (3) of this AD, discrepancies are detected, before next flight, accomplish the applicable corrective actions in accordance with the instructions of Eurocopter AS350 ASB No.05.00.66, or AS355 ASB No. 05.00.60, as applicable to helicopter type.
		(5) Corrective actions as required by paragraph (4) of this AD do not constitute terminating action for the repetitive inspections as required by paragraphs (1), (2) and (3) of this AD.
		<ul> <li>(6) As an alternative to the repetitive inspections required by paragraphs (1),</li> <li>(2) and (3) of this AD, within 10 FH after 23 December 2011 (the effective date of EASA AD 2011-0244-E), deactivate the position strobe light system in accordance with the instructions of paragraph 3.B.4 of Eurocopter AS350 ASB No.05.00.66, or AS355 ASB No. 05.00.60, as applicable to helicopter type.</li> </ul>
		New requirements of this AD:
		(7) Within 660 FH or 13 months, whichever occurs first after 11 December 2013 [the effective date of the original issue of this AD], modify the wiring of the position strobe light power supply unit and install the protector assembly in accordance with the instructions of Airbus Helicopters AS350 ASB No. 33.00.33 or AS355 ASB No. 33.00.20, as applicable to

	helicopter type.
	(8) Modification of a helicopter as required by paragraph (7) of this AD constitutes terminating action for the repetitive inspections required by this AD for that helicopter.
	For a helicopter where the position strobe light system was deactivated as specified in paragraph (6) of this AD, modification as required by paragraph (7) of this AD allows reactivation of the position strobe light system on that helicopter.
Ref. Publications:	Eurocopter AS350 ASB No. 05.00.66, dated 22 December 2011, or Revision 1, dated 20 November 2013, or Airbus Helicopters AS350 ASB No. 05.00.66, Revision 2 dated 17 November 2014.
	Eurocopter AS355 ASB No. 05.00.60, dated 22 December 2011, or Revision 1, dated 20 November 2013 or, Airbus Helicopters AS355 ASB No. 05.00.60 Revision 2 dated 17 November 2014.
	Eurocopter AS350 ASB No. 33.00.33, dated 20 November 2013, or Airbus Helicopters AS350 ASB No. 33.00.33 Revision 1 dated 17 November 2014.
	Eurocopter AS355 ASB No. 33.00.20, dated 20 November 2013, or Airbus Helicopters AS350 ASB No. 33.00.20 Revision 1 dated 17 November 2014.
	The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks :	<ol> <li>If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> </ol>
	<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, Certification Directorate, EASA. E-mail <u>ADs@easa.europa.eu</u>.</li> </ol>
	<ol> <li>For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS HELICOPTERS - Customer Service Technical Support Department, Aéroport de Marseille, Provence, 13725 Marignane Cedex – France Telephone: + 33 (0)4 42 85 99 51, Fax: + 33 (0)4 42 85 99 66. E-mail: <u>Directive.technical-support@eurocopter.com</u>.</li> </ol>

## Appendix 1

Modification	Subject
074611	Installation of protector assembly on the wiring and on the power supply unit of the position strobe light installation
350P085326	Installation and protection of a Wulfsberg RT5000 AM/FM multi-band tactical wide band radio, located in the baggage compartment
073274	Replacement of fuses with circuit-breakers
OP1882	Installation of air conditioning
OP2153	Definition of a new Freon air conditioning optional equipment
OP2698	Replacement of Freon R12
071574	Improvement of the Freon air conditioning installation and maintenance
072063	Installation of the BLU COLLINS 9100HF radio
OP0978	Definition of a new Freon air conditioning optional equipment
OP2162	Replacement of Freon R12 with Freon R134
OP3953	Installation of modified air conditioning installed on version N on version NP