### EASA

## **AIRWORTHINESS DIRECTIVE**

AD No.: 2012-0248

#### Date: 20 November 2012

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:	
EUROCOPTER	

Not applicable

# Type/Model designation(s): SA 330 and AS 332 helicopters

TCDS Number: EASA.R.002

Supersedure: None

Foreign AD:

ATA 67 Rotor Flight Controls – Main Servo-Control – Inspection / Replacement	
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Manufacturer(s):	Eurocopter, formerly Eurocopter France		
Applicability:	AS 332 C, AS 332 C1, AS 332 L, AS 332 L1, AS 332 L2, all serial numbers, if equipped with main servo-controls with Part number (P/N) SC7202, SC7202-2 SC7203, SC7203-X, SC7221 or SC7221-X (X for all part numbers).		
	SA 330 J helicopters, all serial numbers, if equipped with main servo-controls with P/N SC7111, SC7111-X, SC7112 or SC7112-X (X for all part numbers).		
Reason:	Several occurrences were reported to Eurocopter of missing crimping on ball joints of servo-control end-fittings. While slipping of the ball joint of the <u>lower</u> end-fitting of the main servo-control does not significantly affect the service life of this end-fitting, the slipping of the ball joint of the <u>upper</u> end-fitting of the main servo-control can lead to a significant reduction of the service life of this end-fitting.		
	This condition, if not detected and corrected, could lead to failure of a main servo-control upper end fitting, possibly resulting in the loss of control of the helicopter.		
	Prompted by these findings, Eurocopter issued Emergency Alert Service Bulletins (ASB) No. 67.00.45 and ASB No. 67.19, as applicable to the helicopter version, to provide instructions for inspection and, depending on findings, replacement of the main servo-control.		
	For the reasons described above, this AD requires the inspection of the crimping of the ball joint of the upper end-fitting of the main servo-control and depending on findings, replacement of the main servo-control with a serviceable part.		

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Effective Date:	26 November 2012			
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously:			
	(1) Within 85 flight hours (FH) after the effective date of this AD, for each main servo-control installed on helicopter, identify whether the main servo-control has been overhauled or repaired by UTC Actuation Systems / Goodrich Actuation Systems between 01 June 2008 and 15 September 2012, or is listed by part number (P/N) and serial number (S/N) in Appendix 1 of Eurocopter AS332 ASB No. 67.00.45, or SA330 ASB No. 67.19, as applicable to the helicopter version.			
	(2) If, during the identification as required by paragraph (1) of this AD, a main servo-control is found to be installed that has been overhauled or repaired by UTC Actuation Systems / Goodrich Actuation Systems between 01 June 2008 and 15 September 2012, or is listed by P/N and S/N in Appendix 1 of Eurocopter AS332 ASB No. 67.00.45, or SA330 ASB No. 67.19, as applicable to the helicopter version, within 85 FH after the effective date of this AD, accomplish the instructions of paragraphs 3.A, 3.B.1 and 3.B.2.a of Eurocopter AS332 ASB No. 67.00.45, or SA330 ASB No. 67.19, as applicable to the helicopter version.			
	(3) After accomplishment of the instructions of paragraph 3.B.2.a. of Eurocopter AS332 ASB No. 67.00.45, or SA330 ASB No. 67.19, as applicable to the helicopter version, but not later than within 170 FH after the effective date of this AD, accomplish the maintenance actions as specified in Appendix 1 of this AD.			
	(4) From the effective date of this AD, do not install on a helicopter any main servo-control that has been overhauled or repaired by UTC Actuation Systems / Goodrich Actuation Systems between 01 June 2008 and 15 September 2012, or is listed by P/N and S/N in Appendix 1 of Eurocopter AS332 ASB No. 67.00.45, or SA330 ASB No. 67.19, as applicable to the helicopter version, unless in compliance with the requirements of this AD.			
Ref. Publications:	Eurocopter AS332 ASB No. 67.00.45 revision 0 dated 12 November 2012.			
	Eurocopter SA330 ASB No. 67.19 revision 0 dated 12 November 2012.			
	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>			
	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: <u>ADs@easa.europa.eu</u> .			
	<ul> <li>For any question concerning the technical content of the requirements in this AD, please contact:</li> <li>EUROCOPTER (STDI) – Aéroport de Marseille Provence 13725 Marignane Cedex, France; telephone +33 (4) 42 85 97 97; facsimile +33 (4) 42 85 99 66; E-mail: <u>Directive.technical-support@eurocopter.com</u>.</li> </ul>			

#### Appendix 1 - Maintenance actions required by paragraph (3) of this AD

Condition		Action
If the ball joint is not crimped	If the slipping of the ball joint is more than or equal to 1 mm	<ul> <li>Remove the servo-control in accordance with paragraph 1.K of Eurocopter AS332 ASB No. 67.00.45 or SA330 ASB No. 67.19, as applicable to the helicopter version, and return it in accordance with paragraph 2 of Eurocopter AS332 ASB No. 67.00.45 or SA330 ASB No. 67.19, as applicable to the helicopter version, for replacement of the end-fitting ball joint.</li> <li>Accomplish the instructions of paragraph 3.B.3 of Eurocopter AS332 ASB No. 67.00.45 or SA330 ASB No. 67.19, as applicable to the helicopter version.</li> </ul>
	If the slipping of the ball joint is less than 1 mm	<ul> <li>Remove the servo-control in accordance with paragraph 1.K of Eurocopter AS332 ASB No. 67.00.45 or SA330 ASB No. 67.19, as applicable to the helicopter version, and return it, in accordance with paragraph 2 of Eurocopter AS332 ASB No. 67.00.45 or SA330 ASB No. 67.19, as applicable to the helicopter version, for ball joint crimping.</li> <li>Accomplish the instructions of paragraph 3.B.3 of Eurocopter AS332 ASB No. 67.00.45 or SA330 ASB No. 67.19, as applicable to the helicopter version.</li> <li>Accomplish the instructions of paragraph 3.B.3 of Eurocopter AS332 ASB No. 67.00.45 or SA330 ASB No. 67.19, as applicable to the helicopter version.</li> <li>OR</li> <li>Accomplish the instructions of paragraphs 3.B.2.b, 3.B.2.c and 3.B.3 of Eurocopter AS332 ASB No. 67.19, as applicable to the helicopter version.</li> </ul>
If the ball joint is crimped		<ul> <li>Accomplish the instructions of paragraph 3.B.3 of Eurocopter AS332 ASB No. 67.00.45 or SA330 ASB No. 67.19, as applicable to the helicopter version.</li> </ul>