EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2014-0129 **Date: 16 May 2014** 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:	**Type/Model designation(s):**
AIRBUS HELICOPTERS	SA 330, AS 332 and EC 225 helicopters

TCDS Number:	EASA.R.002
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2013-0081R1 dated 20 June 2013.

ATA 67	**Rotors Flight Control – Tail Rotor Control Turnbuckle – Inspection / Replacement**
Manufacturer(s):	Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale)
Applicability:	SA 330 J, AS 332 C, AS 332 C1, AS 332 L, AS 332 L1, AS 332 L2 and EC 225 LP helicopters, all serial numbers, equipped with tail rotor control turnbuckles Part Number (P/N) 330A27-5031-20.
Reason:	During flight control riggings after helicopter maintenance, a failure due to corrosion was reportedly found on one of the two turnbuckles installed on the yaw flight control cables of the tail rotor. The subsequent investigation revealed a lack of Mastinox sealant coating between both sides of the turnbuckle internal tappings and the interface screws of the end-fitting components of the yaw flight control cables, which is likely the cause for development of a galvanic corrosion. This kind of corrosion could affect either the inside of the turnbuckle (tapping threads and/or middle hole of the part) or its external surface. This condition, if not detected and corrected, could lead to failure of a tail rotor control turnbuckle, possibly resulting in loss of control of the tail rotor and, subsequently, of the helicopter. To address this potential unsafe condition, EASA issued AD 2013-0081 to require repetitive inspections of the two tail rotor control turnbuckles and, depending on findings, accomplishment of applicable corrective actions, possibly including replacement of the parts. After that AD was issued, Airbus Helicopters issued Eurocopter Alert Service Bulletin (ASB) No. SA330-05.98 Revision 1, ASB No. AS332-05.00.95 Revision

<table>
<tr><td></td><td>1 and ASB No. EC225-05A031 Revision 1 to provide instructions for detection and correction of corrosion on the affected turnbuckles and to specify that turnbuckles found externally corroded less than or equal to 0,3 mm must be replaced after an anticorrosion treatment application. Consequently EASA issued AD 2013-0081R1.

Since EASA AD 2013-081R1 was issued, Airbus Helicopters redesigned the affected tail rotor control turnbuckle, replacing the material of the original turnbuckle socket made from aluminium with stainless steel material to avoid any galvanic corrosion development, and issued ASB No. SA330-67.24, ASB No. AS332-67.00.49 and ASB No. EC225-67A013 to provide instructions for installation of redesigned turnbuckles P/N 332A27-1655-20 corresponding to MOD 07.27311 or MOD 07.26984, as applicable to helicopter model.

For the reasons described above, this AD retains the inspection requirements of AD 2013-0081R1, which is superseded, and requires replacement of the affected turnbuckles with the redesigned part P/N 332A27-1655-20, which constitutes terminating action for the repetitive inspections.</td></tr>
<tr><td>Effective Date:</td><td>30 May 2014</td></tr>
<tr><td>Required Action(s) and Compliance Time(s):</td><td>Required as indicated, unless accomplished previously:

(1) Within the compliance time as defined in Table 1 of this AD, or before next flight after installation of any used turnbuckle P/N 330A27-5031-20 on a helicopter, as applicable, and, thereafter, at intervals not to exceed 12 months, inspect the two tail rotor control turnbuckles P/N 330A27-5031-20 for absence of corrosion and crack in accordance with the instructions of Airbus Helicopters ASB No. SA330-05.98, ASB No. AS332-05.00.95 or ASB No. EC225-05A031, as applicable to helicopter model.

Table 1 – Inspection of Tail Rotor Control Turnbuckles

<table>
<tr><th>Helicopter Model and Delivery Date</th><th>Compliance Time after 02 April 2013 [the effective date of the original issue of EASA AD 2013-0081]</th></tr>
<tr><td>SA 330 helicopters, and
AS 332 and EC 225 helicopters delivered before 01 March 2013</td><td>Within 110 flight hours or 3 months, whichever occurs first</td></tr>
<tr><td>AS 332 and EC 225 helicopters delivered on or after 01 March 2013</td><td>Within 12 months</td></tr>
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(2) If, during any inspection as required by paragraph (1) of this AD after the effective date of this AD (see paragraph (4) of this AD), corrosion or crack is found on the tappings or middle hole of the internal surface of any turnbuckle, or any crack or corrosion of more than 0,3 mm depth is found on the external surface of any turnbuckle, before next flight, replace both turnbuckles with new P/N 332A27-1655-20 turnbuckles in accordance with the instructions of Airbus Helicopters ASB No. SA330-67.24, ASB No. AS332-67.00.49 or ASB No. EC225-67A013, as applicable to helicopter model.

(3) If, during any inspection as required by paragraph (1) of this AD, corrosion equal to or less than 0,3 mm depth is identified on the external surface of any turnbuckle, accomplish the following actions:

(3.1) Before next flight, accomplish an anti-corrosion treatment of the affected turnbuckle in accordance with the instructions of Airbus Helicopters ASB No. SA330-05.98, ASB No. AS332-05.00.95 or ASB No. EC225-05A031, as applicable to helicopter model; and

(3.2) Within 6 months after an anti-corrosion treatment application as</td></tr>
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	required by paragraph (3.1) of this AD after the effective date of this AD (see paragraph (4) of this AD), replace both turnbuckles with new P/N 332A27-1655-20 turnbuckles in accordance with the instructions of Airbus Helicopters ASB No. SA330-67.24, ASB No. AS332-67.00.49 or ASB No. EC225-67A013, as applicable to helicopter model. (4) Installation of a turnbuckle P/N 330A27-5031-20 as a replacement part, before the effective date of this AD, in accordance with the instructions of Eurocopter ASB No. SA330-05.98, ASB No. AS332-05.00.95 or ASB No. EC225-05A031, as applicable to helicopter model, is acceptable to comply with the requirements of paragraphs (2) and (3.2) of this AD. Installation of a turnbuckle P/N 330A27-5031-20 does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD. (5) Unless already accomplished as required by paragraph (2) or (3.2) of this AD, within 24 months after the effective date of this AD, replace both tail rotor control turnbuckles P/N 330A27-5031-20 with new P/N 332A27-1655-20 turnbuckles in accordance with the instructions of Airbus Helicopters ASB No. SA330-67.24, ASB No. AS332-67.00.49 or ASB No. EC225-67A013, as applicable to helicopter model. (6) From the effective date of this AD, do not install on any helicopter a mix of tail rotor control turnbuckles having P/N 330A27-5031-20 and P/N 332A27-1655-20. (7) Replacement of both tail rotor control turnbuckles with P/N 332A27-1655-20 as required by paragraph (2) or (3.2) or (5) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD.
Ref. Publications:	Airbus Helicopters ASB SA330-05.98 original issue dated 14 March 2013, or Revision 1 dated 05 June 2013. Airbus Helicopters ASB SA330-67.24 original issue dated 16 April 2014. Airbus Helicopters ASB AS332-05.00.95 original issue dated 14 March 2013, or Revision 1 dated 05 June 2013. Airbus Helicopters ASB AS332-67.00.49 original issue dated 16 April 2014. Airbus Helicopters ASB EC225-05A031 original issue dated 14 March 2013, or Revision 1 dated 05 June 2013. Airbus Helicopters ASB EC225-67A013, original issue, dated 16 April 2014 The use of later approved revisions of these documents 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. This AD was posted on 17 April 2014 as PAD 14-073 for consultation until 15 May 2014. No comments were received during the consultation period. 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: Airbus Helicopters – Aéroport de Marseille Provence 13725 Marignane Cedex, France Telephone +33 (4) 42 85 97 97, Facsimile +33 (4) 42 85 99 66 E-mail: Directive.technical-support@eurocopter.com.