# EASA

# **AIRWORTHINESS DIRECTIVE**

Foreign AD :

None

### AD No.: 2010-0183R1

## Date: 07 September 2010

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 EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex L Part M.A.301, the<br/>continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate<br/>an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency<br/>[EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Anticle 14(4) exemption].Design Change Approval Holder :<br/>Agusta S.p.A.<br/>Keystone Helicopter Corporation<br/>Eurocopter UK LtdType/Model designation(s) :<br/>AB139 and AW139 helicopters<br/>Sikorsky S-92A helicopters<br/>Eurocopter Deutschland WBB-EK117 C-2 and<br/>EC 135 helicoptersTCDS Number :EASA.R.006

STC Numbers :	EASA.IM.R.S.01256 (validation of FAASIC SR02408NY-D) for S-92A
	EASA.R.S.01532 for EC 135 P2+ and T2+
	EASA.10028851 for MBB-BK117 C-2

United Kingdom AAN 26529 Including minor change MCA/A/135/787 for EC 135

Revision : This AD revises EASA Emergency AD 2010-0183-E dated 27 August 2010.

ATA 25	Equipment / Furnishings – Spectrolab Nightsun XP Searchlight
Manufacturer(s):	Agusta S.p.A., Agusta Aerospace Corporation, Sikorsky Aircraft Corporation Eurocopter Deutschland GmbH
Applicability:	Agusta S.p.A model AB139 and AW139 helicopters, and
	Sikorsky Aircraft Corporation S-92A helicopters, and
	Eurocopter Deutschland GmbH model MBB-BK117 C-2 and EC 135 series helicopters,
	if equipped with Spectrolab Nightsun XP Gimbal Assemblies P/N 033295 series used on Nightsun XP System P/N 033338 series.
	Note: The listed P/N identifications are those assigned by Spectrolab and might have been re-identified by the design change approval holder.
Reason:	An incident has been reported by a Maintenance Organisation of vibration associated with the Nightsun XP Searchlight. Investigation revealed that the Gimbal Azimuth Top Hex Nut was loose.
	This condition, if not detected and corrected, could lead to a gap between th rubber edging of the top shroud and the Gimbal frame, resulting in

	degradation of pointing accuracy and stability performance and pose excessive vibration. If the nut were to entirely disengage, the Searchlight/Gimbal could disconnect from the helicopter and remain attached solely by the internal cable harness or separate totally, possibly resulting in damage to the helicopter or injury to persons on the ground.
	For the reasons described above, this AD requires repetitive pre-flight checks to verify correct installation and, if discrepancies are detected, the removal of the searchlight unit from the helicopter.
	This AD is considered to be an interim measure, until a modification has been developed, EASA approved and made available by the approval holder of the design change for in-service application.
	This AD has been revised to allow installation of replacement searchlight on already-modified helicopters. New installations remain prohibited, pending the availability of a design solution.
	Revision 1: 21 September 2010
Effective Date:	Original issue: 31 August 2010
Required Action(s) and Compliance Time(s):	Required as indicated, unless previously accomplished:
	(1) Before the next flight after 31 August 2010 [the effective date of the original issue of this AD], and thereafter before the first flight of each day, accomplish the following actions:
	(1.1) Visually check the searchlight installation Gimbal for a gap between the Top Shroud rubbel edging (P/N 033381) and the side covers (P/N 033286. The edging should be in physical contact with the side covers.
	(1.2) Try to move the Searchlight laterally. No gap should appear between the Top Shroud rubber edging (P/N 033381) and the side covers (P/N 033286) and no play should be felt.
	Appendix 1 of this AD shows the area(s) to be checked.
	(2) If during any of the checks as required by paragraph (1) of this AD, discrepancies are detected, before next flight, remove the searchlight assembly from the helicopter and contact the design (change) approval holder as applicable to the installation.
	(3) From the effective date of this AD:
	<ul> <li>(3.1) Do not install a Spectrolab Nightsun XP Gimbal Assembly P/N</li> <li>033295 series on any helicopter as a replacement unit, unless the Gimbal assembly has passed the checks as required by paragraph</li> <li>(1) of this AD.</li> </ul>
	(3.2) Do not modify a helicopter in accordance with any of the affected STC modifications or TC kit as affected by this AD.
Ref. Publications:	Eurocopter UK Limited Service Bulletins (SB), all dated 4 August 2010:
	SB/135787-464 Issue A SB/1351151-465 Issue A SB/1451167-466 Issue A
	Spectrolab Safety and Service Bulletin # SL 0810-01 dated 12 August 2010.
	The listed publications pertain to the subject addressed by this AD, but accomplishment of the instructions contained therein is not enough to comply 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. The required actions and the risk allowance have granted the issuance of

	a Final AD with Request for Comments, postponing the public consultation process after publication.
3.	Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u> .
4.	For any questions concerning the technical content of the requirements in this AD, please contact, as applicable:
	Agusta S.p.A. Customer Support – Via del Gregge 100, 21015 Lonate Pozzolo (VA) – Italy Telephone: + 39 0331 664873; Fax: + 39 0331 664680; E-mail: <u>absereng@agustawestland.com</u> .
	Eurocopter UK Limited, Oxford Airport, Kidlington, Oxford OX5 1QZ, United Kingdom, Telephone +44 1865 852 400, Fax: 444 1865 842 827, Email: <u>sales@eurocopter.co.uk</u> .
	Keystone Helicopter Corporation, 110 East Stewart Huston Drive, Coatesville, Pennsylvania 19320, United States of America, Telephone +1 610 644 4545, Fax: +1 610 883 4411, E-mail jim.scanish@keystonehelicopter.com
	Spectrolab, Inc., 12500 Gladstone Avenue, Sylmar, California 91342, United States of America, telephone: +1 818 365-4611, Fax: +1 818 361-5102, E-mail <u>customersenuce@spectrolab.com</u> or <u>illumination@spectrolab.com</u> , Website <u>http://www.spectrolab.com/</u> .

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Appendix 1 – Photo showing location to be checked