

EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2010-0237</p> <p>Date: 16 November 2010</p> <p>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</p>
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.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].</p>	
<p>Design Change Approval Holder : Agusta S.p.A. Keystone Helicopter Corporation Eurocopter UK Ltd</p>	<p>Type/Model designation(s) : AB139 and AW139 helicopters Sikorsky S-92A helicopters Eurocopter Deutschland MBB-BK117 C-2 and EC 135 helicopters</p>
<p>TCDS Number : EASA.R.006</p> <p>STC Numbers : EASA.IM.R.S.01256 (validation of FAA STC 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 MCH/A/135/787 for EC 135</p>	
Foreign AD :	None
Supersedure:	This AD supersedes EASA AD 2010-0183R1 dated 07 September 2010.
ATA 25	Equipment / Furnishings – Spectrolab Nightsun XP Searchlight – Inspection / Removal / Replacement
Manufacturer(s):	Agusta S.p.A., Agusta Aerospace Corporation, Sikorsky Aircraft Corporation, Eurocopter Deutschland GmbH
Applicability:	<p>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 and 033704 series.</p> <p>Note: The listed P/N identifications are those assigned by Spectrolab and might have been re-identified by the design change approval holder.</p>
Reason:	<p>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.</p> <p>This condition, if not detected and corrected, could lead to a gap between the rubber edging of the top shroud and the Gimbal frame, resulting in degradation of pointing accuracy and stability performance and pose</p>

	<p>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.</p> <p>EASA issued Emergency AD 2010-0183-E, later revised, as an interim measure to require repetitive inspections and, depending on findings, the removal of the searchlight from the helicopter.</p> <p>One of the affected approval holders, Eurocopter UK Ltd, has now developed modifications that remedy the problem and which allows (re-)installation of the searchlight.</p> <p>For the reasons described above, this AD retains the inspection requirements of AD 2010-0183R1, which is superseded, and requires, for the affected Eurocopter Deutschland GmbH helicopters, modification of the searchlight installation by replacing the Nightsun XP gimbal azimuth top hex nut with a dual-locking nut. Modification of a Eurocopter Deutschland GmbH helicopter as required by this AD is terminating action for the repetitive inspections. For all other affected helicopters, this AD requires the removal of the searchlight, pending the development of approved modification instructions by the respective TC/STC holders.</p>
Effective Date:	30 November 2010.
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless previously accomplished:</p> <ol style="list-style-type: none"> (1) Before the next flight after 31 August 2010 [the effective date of EASA AD 2010-0183-E], and thereafter before the first flight of each day, accomplish the following actions: <ol style="list-style-type: none"> (1.1) Visually check the searchlight installation Gimbal for a gap between the Top Shroud rubber 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. <p>Appendix 1 of this AD shows the area(s) to be checked.</p> (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) Within 30 days after the effective date of this AD, irrespective of findings, remove the searchlight assembly from the helicopter, as applicable to the installation, or, for Eurocopter Deutschland GmbH helicopters, install the Searchlight in accordance with the instructions of the appropriate Eurocopter UK Ltd Service Bulletin listed in the Reference Publications. (4) Modification of a helicopter as required by paragraph (3) of this AD constitutes terminating action for the repetitive inspection requirements of this AD. (5) From the effective date of this AD: <ol style="list-style-type: none"> (5.1) Do not install a Spectrolab Nightsun XP Gimbal Assembly P/N 033295 series on any helicopter as a replacement unit, or (for Eurocopter Deutschland GmbH helicopters) unless the affected searchlight has been installed in accordance with the instructions of the appropriate Eurocopter UK Ltd Service Bulletin listed in the Reference Publications.

	(5.2) Do not modify a helicopter in accordance with the Keystone Helicopter Corporation STC or the Agusta S.p.A. TC kit affected by this AD.
Ref. Publications:	<p>For EC 135 P2+ and T2+ equipped with EASA.R.S.01532: Eurocopter UK Ltd Service Bulletin SB/1351151-472, Issue A, dated 10 November 2010.</p> <p>For MBB-BK117 C-2 equipped with EASA.10028851: Eurocopter UK Ltd Service Bulletin SB/1451167-473, Issue A, dated 10 November 2010.</p> <p>For EC 135 equipped with United Kingdom AAN 26529 including minor change MCH/A/135/787: Eurocopter UK Ltd Service Bulletin SB/135787-467, Issue A, dated 10 November 2010.</p> <p>The use of later approved revisions of the above Eurocopter UK Ltd Service Bulletins is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 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: ADs@easa.europa.eu. 4. For any questions concerning the technical content of the requirements in this AD, please contact, as applicable: <p>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: aw139.mbx@agustawestland.com.</p> <p>Eurocopter UK Limited, Oxford Airport, Kidlington, Oxford OX5 1QZ, United Kingdom, Telephone +44 1865 852 400, Fax: +44 1865 842 827, E-mail: Airworthiness.Office@eurocopter.co.uk.</p> <p>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.</p> <p>Spectrolab, Inc., 12500 Gladstone Avenue, Sylmar, California 91342, United States of America, telephone: +1 818 365-4611, Fax: +1 818 361-5102, E-mail customerservice@spectrolab.com or illumination@spectrolab.com. Website http://www.spectrolab.com/.</p>

Appendix 1 – Photo showing location to be checked

