AIRWORTHINESS DIRECTIVE **EASA CANCELLATION NOTICE** AD No.: 2010-0237-CN Date: 20 June 2013 Note: This Airworthiness Directive (AD) Cancellation Notice 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. **Design Change Approval Holders:** Type/Model designation(s): AGUSTAWESTLAND S.p.A. AB139 and AW139 helicopters Sikorsky S-92A helicopters KEYSTONE HELICOPTER CORPORATION **EUROCOPTER UK Ltd** Eurocopter Deutschland MBB-BK117 C-2 and EC 135 helicopters EASA.R.006 TCDS Number: Foreign AD: FAA AD 2013-10-01 dated 16 May 2013. Cancellation: This Notice cancels EASA AD 2010-0237R2 dated 14 December 2010. CANCELLED: Equipment / Furnishings - Spectrolab Nightsun XP **ATA 25** Searchlight - Inspection / Removal / Replacement Agusta S.p.A., Agusta Aerospace Corporation, Sikorsky Aircraft Corporation, Manufacturer(s): 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 certain Gimbal Assemblies, used on Spectrolab Nightsun XP Searchlight Assemblies listed in Table 1 of this AD-CN. Table 1 Searchlight Assembly Gimbal Assembly P/N Modification Standard P/N (any suffix) 033295-1 033338 Revision D and lower 033295-2 033704 Revision C and lower Note: The listed P/N identifications are those assigned by Spectrolab and might have been re-identified by the design change approval holder. An incident has been reported by a Maintenance Organisation of vibration Reason: 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 the 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.

To address this potential unsafe condition, 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.

Spectrolab, the Searchlight manufacturer, subsequently developed a modification of the Searchlight installation that remedies the problem by replacing the Nightsun XP gimbal azimuth top hex nut with a dual-locking nut. This action includes re-identification of the gimbals as either P/N 033295-3 or P/N 033295-4 and assigns accordingly a new airworthy revision standard to the P/N of the modified Nightsun XP Searchlight Assembly.

One of the affected approval holders, Eurocopter UK Ltd, subsequently developed the EASA-approved modifications which allow embodiment of the Spectrolab design changes on helicopters modified by Eurocopter UK STC.

Prompted by these developments, EASA issued AD 2010-0237, retaining the inspection requirements of EASA AD 2010-0183R1, which was superseded, required removing the searchlight from the helicopter and allowed, for the affected Eurocopter Deutschland GmbH helicopters, modification of the searchlight installation by installing a modified searchlight assembly, having a higher revision standard and a new P/N Gimbal assembly.

After EASA AD 2010-0237 was published, the other affected design (change) approval holders developed their own modifications, which have been approved by EASA, to allow embodiment of the Spectrolab design change on Agusta AB139 and AW139 helicopters, and on Sikorsky S-92A helicopters modified by Keystone STC, respectively.

EASA AD 2010-0237R1 was issued to include reference to Agusta Bollettino Tecnico (BT) 139-231 and Keystone Helicopter Corporation Service Bulletin (SB) 10-11 revision C, which provide the terminating action instructions for the AB139, AW139 and S-92A helicopters affected by the AD. In addition, the Applicability was reduced to helicopters that have Gimbal Assembly P/N and Searchlight Assembly P/N as defined in Table 1 of the Applicability.

EASA AD 2010-0237R2 was issued to allow installation of a Searchlight Assembly with a higher Revision number than required by the AD, provided that the applicable (Supplemental) Type Certificate holder has certified the installation of a Searchlight Assembly with that Revision number.

Since EASA AD 2010-0237R2 was issued, the FAA published AD 2013-10-01 which will become effective on 20 June 2013, and containing the same requirements as EASA AD 2010-0237R2, except that the AD applies to all helicopters that have the affected searchlight installed, not only those to which EASA AD 2010-0237 applied.

For the reasons described above, EASA has adopted FAA AD 2013-10-01 and EASA AD 2010-0237R2 is hereby cancelled accordingly.

Effective Date:

20 June 2013

Compliance

Not applicable

Ref. Publications:

For EC 135 P2+ and T2+ helicopters modified by STC EASA.R.S.01532: Eurocopter UK Ltd SB 1351151-472, Issue A, dated 10 November 2010.

For MBB-BK117 C-2 helicopters modified by EASA STC 10028851: Eurocopter UK Ltd SB 1451167-473, Issue A, dated 10 November 2010.

For EC 135 helicopters modified by UK AAN 26529 (including minor change MCH/A/135/787): Eurocopter UK Ltd SB 135787-467, Issue A, dated 10 November 2010.

Agusta BT 139-231 dated 18 November 2010.

Keystone Helicopter SB 10-11 revision C dated 22 October 2010.

The use of later approved revisions of these documents (see Note below) is acceptable for compliance with the requirements of FAA AD 2013-10-01.

Note: European regulations require that to modify a helicopter by installation of a different P/N searchlight, as specified in FAA AD 2013-10-01, the design (change) approval holder must provide approved aircraft modification instructions, the publications of which are listed above. Consequently, using only the instructions of Spectrolab Nightsun XP Searchlight Safety and Service Bulletin No. SL 0810-01, Amendment No. 2, dated September 24, 2010 is insufficient for helicopter modification.

Remarks:

- Enquiries regarding this AD-CN should be referred to the Safety Information Section, Executive Directorate, EASA.
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