



EASA Safety Information Notice

No.: 2007 – 13

Issued: 22 May 2007

Subject: Sikorsky Aircraft Model S-61 Series helicopters Blade Inspection Method (BIM®) system.

Ref. Publications: FAA Special Airworthiness Information Bulletin (SAIB) NE-07-30, dated April 19, 2007. This SAIB refers to 2 existing FAA Airworthiness Directives (ADs), 74-20-07 R5 and 85-18-05 R2. Both ADs are considered by EASA to be applicable under EC Regulation 1702/2003, Article 2, sub 3(a)(iii) to all S-61 helicopters registered in EU Member States.

Introduction: This Safety Information Notice (SIN) refers to FAA SAIB NE-07-30 (attached to this document as pages 2 and 3) and alerts owners, operators, pilots, mechanics, and certificated repair facilities of all **Sikorsky Aircraft S-61 Series helicopters** to restrict from further flight any S-61 main rotor blade that has an indication from the Blade Inspection Method (BIM®) system.

Applicability: All Sikorsky Aircraft S-61 Series helicopters.

Recommendation: EASA fully endorses the FAA recommendations.

This Safety Information Notice is for information only. No AD action by NAAs is required.

Contact: For further information contact the Section Airworthiness Directives, Certification Directorate, EASA.
E-mail: ADs@easa.europa.eu



This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners, operators, pilots, mechanics, and certificated repair facilities of all **Sikorsky Aircraft Model S-61 helicopters** to restrict from further flight any S-61 main rotor blade that has an indication from the Blade Inspection Method (BIM®) system. This restriction is to continue until the cause of the indication is determined and corrected. We are issuing this SAIB because we have been notified of the determination of a fatigue crack in a blade retrieved from a fatal accident of an S-61 helicopter.

Background

The FAA issued airworthiness directive (AD) 74-20-07 R5 that became effective September 26, 1984. This AD applies to the main rotor Visual BIM® and Cockpit BIM® systems of S-61 helicopters. If the blade is equipped with only the Visual BIM®, the pressure indicators must be checked every 3 hours time-in-service. If a Cockpit BIM® is installed, the electrical circuit must be tested every 3 hours time-in-service. The 3-hour interval allows sufficient time to comply with instructions in the Rotorcraft Flight Manual after an in-flight BIM® indication. This interval was based on the assumption that the spar cracks immediately after the last check or test, which causes leakage of internal pressure.

Note: FAA AD 85-18-05 R2 applies to Sikorsky S-61 main rotor blades for helicopters used for more than six repeated external lifts per hour. The BIM® inspection intervals are more restrictive for these operations.

AD 74-20-07 R5 requires that each blade with any black or red indication visible in the Visual BIM® blade pressure indicator, or whose transducer of the Cockpit BIM® activates the cockpit warning light is considered to be unsafe. Any such blade is restricted from further flight until the cause of the indication is determined and corrected in accordance with the procedures given in Sikorsky Service Bulletin No. 61B15-6P or later FAA-approved revision (or Maintenance Manuals SA 4045-80 and SA 4045-101).

Sikorsky Aircraft Corporation issued Safety Advisory SSA-S61-06-002, dated October 20, 2006, to emphasize the need to follow flight manual and maintenance manual procedures. The advisory carried the following warning:

WARNING

Failure to follow established technical directives and publications during inspection, maintenance and repair of main rotor blades equipped with BIM systems could result in spar damage remaining undetected. Main rotor blade failure will result in loss of control of the helicopter, either on the ground or in the air, and subsequent loss of life and property.

Recommendation

We remind all owners and operators of Sikorsky S-61 helicopters that any BIM indication should be viewed as a spar failure of that blade and, as stated in FAA AD 74-20-07 R5AD, that blade should not be flown until the cause of the indication is **determined and corrected.**

For Further Information Contact

FAA Contact; Richard Noll, Aerospace Safety Engineer, FAA Boston Aircraft Certification Office, ANE-150, 12 New England Executive Park, Burlington, MA 01803; (781) 238-7160; email: dick.noll@faa.gov

For Service Letter Information Contact

Sikorsky Aircraft Corporation Contact: Sikorsky Customer Service Engineering Desk at 1-800 Winged-S or E-mail: sikorskywcs@sikorsky.com or Phone: (203) 416-4299.