



## Airworthiness Directive

**AD No.:** 2014-0162R2

**Issued:** 05 February 2019

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 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 [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

### Design Approval Holder's Name:

AIRBUS HELICOPTERS

### Type/Model designation(s):

SA 365 and AS 365 helicopters

**Effective Date:** Revision 2: 05 February 2019  
Original issue and Revision 1: 24 July 2014

**TCDS Number(s):** EASA.R.105

**Foreign AD:** Not applicable

**Revision:** This AD revises EASA AD 2014-0162R1 dated 11 July 2014.

## ATA 53 – Fuselage – 9° Upper Frame – Inspection

### Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France, Aerospatiale

### Applicability:

SA 365 N, SA 365 N1, AS 365 N2 and AS 365 N3 helicopters, all serial numbers, except those that have AH modification (mod) 07 53D21 embodied in production.

Note: This AD is no longer applicable to SA 366 G1 helicopters, due to surrendering its type certificate by EASA on 15 November 2017.

### Definitions:

For the purpose of this AD, the following definitions apply:

**The inspection ASB:** AH Alert Service Bulletin (ASB) AS365 05.00.68.

**The modification SB:** AH Service Bulletin (SB) AS365-53.00.57.

### Reason:

An occurrence was reported where, during a major inspection of an AS 365 N2 helicopter, a crack was detected on the 9° frame. The affected helicopter had accumulated 10 786 flight hours (FH) at



the time of the inspection. The crack was located 230 mm above the cabin floor and had grown over a large section of the 9° frame on the right hand (RH) side.

To address this potential unsafe condition, EASA issued Emergency AD 2009-0125-E to require repetitive detailed visual inspections on the RH and left hand (LH) side of the 9° frame to detect any crack and, depending on findings, accomplishment of applicable corrective action(s). After that AD was issued, the results of analyses demonstrated that the flight time leading to crack initiation in the affected area varied significantly depending on the weight and balance data of the affected helicopter models. Consequently, EASA issued EASA Emergency AD 2010-0064-E, retaining the requirements of EASA AD 2009-0125-E, which was superseded, but modifying compliance times, depending on helicopter model. Since EASA Emergency AD 2010-0064-E was issued, further analysis led to an amendment of the inspection thresholds and enlargement of the area to be inspected up to the junction with the upper part of the 9° frame and, consequently, EASA issued AD 2014-0159.

Although no incident was reported involving the upper part of the 9° frame, analyses conducted by AH show that crack may be initiated also in this area.

This condition, if not detected and corrected, could lead to a structural failure of the 9° frame and reduced structural integrity of the helicopter.

To provide inspection instructions addressing the upper part of the 9° frame, AH issued the inspection ASB to provide inspection instructions of the upper part of the 9° frame and EASA issued AD 2014-0162 (later revised).

After EASA AD 2014-0162R1 was issued, AH developed mod 0753D22, 0725C68, 0745D22, 0721C34, 0745D09, as applicable to helicopter model, and issued the modification SB to provide instructions for in-service structural reinforcement of the 9° frame.

This AD is revised to introduce the modification SB as a terminating action for repetitive inspections required by this AD.

#### **Required Action(s) and Compliance Time(s):**

Required as indicated, unless accomplished previously:

#### **Inspection(s):**

- (1) For helicopters which, on 24 July 2014 [the effective date of this AD at original issue], accumulated less FH and flight cycles (FC), than the threshold as defined in Table 1 of this AD, as applicable to helicopter model: Within 75 FH after exceeding the threshold as defined in Table 1 of this AD, whichever occurs first, and as applicable to helicopter model and, thereafter, at interval not to exceed 75 FH, inspect the upper part of the 9° frame in accordance with the instructions of the inspection ASB.



Table 1 – Threshold to Determine Initial Inspection

<b>Model</b>	<b>Service Life Accumulated Since First Flight (FH or FC, whichever occurs first)</b>
SA 365 N	54 250 FC or 27 125 FH
SA 365 N1	50 650 FC or 25 325 FH
AS 365 N2	45 650 FC or 22 825 FH
AS 365 N3	44 150 FC or 22 075 FH
[Deleted]	[Deleted]

- (2) For helicopters which, on 24 July 2014 [the effective date of this AD at original issue], accumulated FH or FC equal to or more than the threshold as defined in Table 1 of this AD, as applicable to helicopter model: Within 75 FH after 24 July 2014 [the effective date of this AD at original issue] and, thereafter, at interval not to exceed 75 FH, inspect the upper part of the 9° frame in accordance with the instructions of the inspection ASB.

**Corrective Action(s):**

- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, any crack is detected, before next flight, contact AH for approved repair instructions and accomplish those instructions accordingly.

**Terminating Action:**

- (4) Accomplishment of a repair as required by paragraph (3) of this AD does not constitute terminating action for the repetitive inspections as required by paragraph (1) or (2) of this AD, as applicable.
- (5) Modification of a helicopter in accordance with the instructions of the modification SB constitutes terminating action for repetitive inspections required by this AD for that helicopter.

**Ref. Publications:**

AH ASB AS365 05.00.68 original issue dated 07 April 2014, or Revision 1 dated 19 May 2015, or Revision 2 dated 20 December 2018.

AH SB AS365-53.00.57 original issue dated 20 December 2018.

The use of later approved revisions of the above-mentioned 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.



3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters (Technical Support), Aéroport de Marseille Provence 13725 Marignane Cedex, France, Telephone +33 (0)4 42 85 97 97, Fax +33 (0)4 42 85 99 66, Web portal: <https://keycopter.airbushelicopters.com> > Technical Requests Management, E-mail: [support.technical-dyncomp.ah@airbus.com](mailto:support.technical-dyncomp.ah@airbus.com), and [TechnicalSupport.Helicopters@airbus.com](mailto:TechnicalSupport.Helicopters@airbus.com).

