



適航指令發布單

Airworthiness Directive Issuance Form

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|---|--|---------------------|----------|
| 民航局 AD 編號 AD number | CAA-2019-07-018 | 發布日期 Date issued | 2019/8/2 |
| 適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable) | SA 365 N, SA 365 N1, AS 365 N2, AS 365 N3, EC155 B and EC155 B1 helicopters, all serial numbers (s/n); AS 350 B3 helicopters, all s/n, if equipped with dual hydraulic system (OP 3346 or OP 3082); EC 130 B4 and EC 130 T2 helicopters, all s/n; and AS355 F, AS355 F1, AS355 F2, AS355 N and AS355 NP helicopters, all s/n. | | |
| 主旨摘要 | Rotors Flight Control - Main Rotor Servo Actuators - Inspection | | |
| 民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other | 設計國民航主管機構 Original Authorities <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> FAA <input checked="" type="checkbox"/> EASA <input type="checkbox"/> Brazil <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> DGAC </div> <div style="width: 48%;"> <input type="checkbox"/> Germany LBA <input type="checkbox"/> CAA-NL <input type="checkbox"/> UK CAA <input type="checkbox"/> Japan CAB <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____ </div> </div> | | |
| | 設計國 AD 編號 Original AD number | 2019-0184 | |
| | 1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No) | | |
| 備註 Note | ATA 67. Ref. Publications: AH AS365 Emergency ASB 67.00.17 original issue dated 25 July 2019. and AH EC155 Emergency ASB 67A016 original issue dated 25 July 2019. and AH AS350 Emergency ASB 67.00.77 original issue dated 25 July 2019. and AH EC130 Emergency ASB 67A021 original issue dated 25 July 2019. and AH AS355 Emergency ASB 67.00.48 original issue dated 25 July 2019. | | |
| 註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw | | | |



Airworthiness Directive

AD No.: 2019-0184

Issued: 29 July 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, AS 365, EC155, AS 350, EC 130 and AS355 helicopters

Effective Date: 12 August 2019

TCDS Number(s): EASA.R.105, EASA.R.008, EASA.R.146

Foreign AD: Not applicable

Supersedure: None

ATA 67 – Rotors Flight Control – Main Rotor Servo Actuators – Inspection

Manufacturer(s):

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

Applicability:

SA 365 N, SA 365 N1, AS 365 N2, AS 365 N3, EC155 B and EC155 B1 helicopters, all serial numbers (s/n);

AS 350 B3 helicopters, all s/n, if equipped with dual hydraulic system (OP 3346 or OP 3082);

EC 130 B4 and EC 130 T2 helicopters, all s/n; and

AS355 F, AS355 F1, AS355 F2, AS355 N and AS355 NP helicopters, all s/n.

Definitions:

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

The applicable ASB: AH Emergency Alert Service Bulletin (ASB), single publication, applicable to the different helicopter types and models as identified in Table 1 of this AD.

Affected part: Main rotor (M/R) servo actuators as identified by Manufacturer Part Number (MP/N) and AH P/N in Table 2 of this AD, supplied by AH before the effective date of this AD.



Serviceable part: An affected part that, before installation, has passed an inspection (no defects detected) in accordance with the instructions of paragraph 3.B of the ASB; or an M/R servo actuator, having an MP/N and AH P/N as identified in Table 2 of this AD, that is new (not previously installed) and supplied by AH after the effective date of this AD.

Reason:

During a cruise flight, an AS 365 N3 helicopter experienced a sudden, strong nose-up attitude followed by intensive vibrations and increased loads on the flight controls. The pilots were able to perform an emergency landing without any damages, as per the procedure described in the Flight Manual. The post-flight visual inspection of the front left-hand M/R servo actuator showed that the threaded-shouldered bushing holding the lower end-fitting was uncoupled from the actuator body.

This condition, if not detected and corrected, could lead to loss of control of the helicopter.

To address this potential unsafe condition, AH issued the ASB, providing inspection instructions. The inspection is extended to other helicopter types and models, due the similarity in design of the installed M/R servo actuators.

For the reasons described above, this AD requires a one-time inspection of each affected part for correct installation of the threaded-shouldered bushing and, depending on findings, replacement.

This AD is considered an interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within 55 flight hours (FH) after the effective date of this AD, inspect each affected part in accordance with the instructions of paragraph 3.B of the applicable ASB.

Corrective Action(s):

- (2) If, during the inspection as required by paragraph (1) of this AD, the installation of the threaded-shouldered bushing of an affected part is found defective, before next flight, replace that affected part with a serviceable part.
- (3) If, during the inspection as required by paragraph (1) of this AD, the threaded-shouldered bushing of an affected part is found correctly installed, place a slip-mark on the components of the threaded-shouldered bushing and end-fitting joint of that affected part in accordance with the instructions of paragraph 3.B of the applicable ASB.
- (4) Within 15 FH after accumulating 150 FH since accomplishment of the actions as required by paragraph (3) of this AD, inspect the slip-mark for alignment in accordance with instructions of paragraph 3.B of the applicable ASB.
- (5) If, during the inspection as required by paragraph (4), any segment of the slip-mark is found not aligned, replace the affected part with a serviceable part.



Parts Installation:

- (6) From the effective date of this AD, it is allowed to install an affected part on any helicopter, provided the part is a serviceable part, as defined in this AD.

Table 1 – Applicable ASB

| Type / Model | ASB Number (original issue) |
|---------------------------------------|-----------------------------|
| SA 365 N and N1, AS 365 N1, N2 and N3 | 67.00.17 |
| EC155 B and B1 | 67A016 |
| AS 350 B3 | 67.00.77 |
| EC 130 B4, T2 | 67A021 |
| AS355 F, F1, F2, N and NP | 67.00.48 |

Table 2 – Affected Parts

| Type(s) | P/N (all s/n) |
|--------------------------|---|
| AS 365 and EC155 | MP/N SC8031 (P/N 704A44831074), MP/N SC8031-1 (P/N 704A44831117), MP/N SC8031-2 (P/N 704A44831144), MP/N SC8031A (P/N 704A44831106), MP/N SC8032 (P/N 704A44831097), MP/N SC8032-1 (P/N 704A44831118), MP/N SC8032-2 (P/N 704A44831145), MP/N SC8033-1 (P/N 704A44831127), MP/N SC8033-2 (P/N 704A44831146), MP/N SC8034-1 (P/N 704A44831128), MP/N SC8034-2 (P/N 704A44831147), MP/N SC8037 (P/N 704A44831149) and MP/N SC8037-1 (P/N 704A44831155). |
| AS 350, EC 130 and AS355 | MP/N SC8042 (P/N 704A44831102) and MP/N SC8043 (P/N 704A44831103) |

Ref. Publications:

AH AS365 Emergency ASB 67.00.17 original issue dated 25 July 2019.

AH EC155 Emergency ASB 67A016 original issue dated 25 July 2019.

AH AS350 Emergency ASB 67.00.77 original issue dated 25 July 2019.

AH EC130 Emergency ASB 67A021 original issue dated 25 July 2019.

AH AS355 Emergency ASB 67.00.48 original issue dated 25 July 2019.

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. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: 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)
Web portal: <https://keycopter.airbushelicopters.com> Technical Requests Management, or
E-mail: support.technical-hydraulics.ah@airbus.com, and
TechnicalSupport.Helicopters@airbus.com.

