CIVIL AVIATION AUTHORITY
CZECH REPUBLIC
Airworthiness Division
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AIRWORTHINESS DIRECTIVE

Number: CAA-AD-030/2004
Date of issue: April 06, 2004
EUROCOPTER
AS 355

HELICOPTER – FUSELAGE STRUCTURE – INSPECTION

Applicability: AS 355 helicopter versions E, F, F1, F2 and N
- pre-MOD073215, or
- not equipped with the four reinforcement angles, P/Nos. 350A08.2493.20 / .21 / .22 / .23, following the repair carried out in accordance with MRM Work Card 53.10.22.772.

Effective date: May 13, 2004

Compliance: Required as indicated in DGAC AD F-2004-036.

Remarks: The compliance of this AD must be recorded in Aircraft Logbook, where applicable the requirements of this AD must be integrated into Aircraft Technical Documentation. Address inquiries concerning this AD to: Civil Aviation Authority, Airworthiness Division, Ruzyne Airport, 160 08 Prague 6, Czech Republic, tel: 420 233320922, fax: 420 220562270.

Ing. Pavel MATOUŠEK
director

DGAC AD No.: F-2004-036
Issue date: Match 17, 2004

Airworthiness Directive(s) replaced: None
Person in charge of airworthiness: **EUROCOPTER**
Type(s): **AS 355 helicopters**
Type certificate(s) No. 168
TCDS No 168
ATA chapter: 53
Subject: Fuselage - Rear structure junction frame

1. EFFECTIVITY:
AS 355 helicopter versions E, F, F1, F2 and N
- pre-MOD073215, or
- not equipped with the four reinforcement angles, P/Nos. 350A08.2493.20 / .21 / .22 / .23, following the repair carried out in accordance with MRM Work Card 53.10.22.772.

2. REASONS:
This Airworthiness Directive (AD) is issued following some cases of cracks discovered in the rear structure/tail boom junction frame.
In these conditions, and with a high thrust load from the tail rotor, the strength margins of this junction may be insufficient.

3. MANDATORY ACTIONS AND COMPLIANCE TIMES:
The following measures are rendered mandatory from the effective date of this AD:
3.1. For aircraft not equipped with two reinforcement angles on the RH side of the rear frame in accordance with the repair defined on MRM Work Card 53.10.22.772:
3.1.1. Aircraft that have logged less than 2,600 flying hours:
- at 2,700 flying hours at the latest, comply with the instructions described in paragraph 2.B.1.A of referenced EUROCOPTER AS 355 Alert Service Bulletin (ASB) No. 05.00.42 then,
- at intervals not exceeding 550 flying hours, inspect the RH side of the rear frame in compliance with the instructions described in paragraph 2.B.1.B of the referenced ASB.
3.1.2. Aircraft that have logged more than 2,600 flying hours:
- no later than within 100 flying hours, comply with the instructions described in paragraph 2.B.1.Aof the referenced ASB then,
- at intervals not exceeding 550 flying hours, comply with the instructions described in paragraph 2.B.1.B of the referenced ASB.
3.1.3. According to the results of the inspections carried out in compliance with above paragraph 3.1.1. or 3.1.2.:
- if there is no crack in the rear frame, comply with the instructions in paragraph 2.B.1.B of the referenced ASB, at intervals not exceeding 550 flying hours.
3.1.4. According to the results of the inspections carried out in compliance with above paragraph 3.1.1.,3.1.2. or 3.1.3.:
a) If there is a crack in the rear frame, of length less than or equal to 30 mm, comply with the instructions in paragraph 2.B.1.B of the referenced ASB, at intervals not exceeding 110 flying hours.
b) In all cases, and after the inspections carried out in compliance with above step a), if there is a crack in the rear frame, more than 30 mm long, carry out the repair as per MRM Work Card 53.10.22.772, no later than:
- within 110 flying hours, if all the cracks are less than or equal to 50 mm,
- before resuming flights, if at least one crack is more than 50 mm long.
3.2. For aircraft equipped with two reinforcement angles on the RH side of the rear frame in accordance with the repair defined on MRM Work Card 53.10.22.772:
3.2.1. Aircraft that have logged less than 2,600 flying hours:
- at 2,700 flying hours at the latest, then at intervals not exceeding 550 flying hours, comply with the instructions described in paragraph 2.B.2 of the referenced ASB.
3.2.2. Aircraft that have logged more than 2,600 flying hours:
- no later than within 100 flying hours, then at intervals not exceeding 550 flying hours, comply with the instructions described in paragraph 2.B.2 of the referenced ASB.
3.2.3. According to the results of the inspections carried out in compliance with above paragraph 3.2.1., or 3.2.2.:
- If there is no crack in the reinforcement angles:
. at intervals not exceeding 550 flying hours, comply with the instructions described in paragraph 2.B.2 of the

referenced ASB.
- If there is a crack in the reinforcement angles:
. before resuming flights, replace the frame in compliance with the instructions described in paragraph 2.B.2 of the referenced ASB.

4. REFERENCE PUBLICATION:
EUROCOPTER AS 355 Alert Service Bulletin No. 05.00.42 at original issue (if already performed) or at Revision 1 (Any subsequent approved revision of this ASB is acceptable).

5. EFFECTIVE DATE:
March 27, 2004.

6. REMARK:
For any questions concerning the technical content of the requirements in this AD, please contact:
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7. APPROVAL:
This AD is approved under EASA reference No 2004-2108 dated March 09, 2004.