	AIRWORTHINESS DIRECTIVE No F-2004-036		Distribution: A	Issue date: March 17, 2004	Page : 1/3
	Direction générale de l'aviation civile France GSAC publication	This Airworthiness Directive is published by the DGAC : <input checked="" type="checkbox"/> on behalf of EASA, the Primary Airworthiness Authority for the affected product. <input type="checkbox"/> as the Registration Airworthiness Authority for the affected aircraft..		<i>Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.</i>	
No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive, unless otherwise agreed with the Authority of the State of Registry.					
Corresponding foreign Airworthiness Directive(s): Not applicable			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-MOD 073215, 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.

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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.A of 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).

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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.