

<b>EASA</b>	<b>PROPOSED AIRWORTHINESS DIRECTIVE</b>
	<p><b>PAD No: 06-047</b></p> <p><b>Date: 3 March 2006</b></p>
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.	
<b>Type Approval Holder's Name:</b> EUROCOPTER	<b>Type/Model designation(s):</b> AS 355
TCDS Number: DGAC 168	
Foreign AD: None	
Supersedes: None	
<b>ATA 55</b>	<b>Stabilizers – Upper and Lower Fins</b>
Manufacturer(s):	EUROCOPTER , EUROCOPTER – FRANCE, AEROSPATIALE
Applicability:	AS 355 E, F, F1, F2 and N helicopters.
Reason:	<p>This Airworthiness Directive (AD) is issued following the discovery of two cases of cracks in the spar of the upper fin on AS 355 N helicopters.</p> <p>The growth of a crack in the attachment spar of a fin can, in time, lead to the failure of the spar and the loss of the fin.</p> <p>Compliance with this AD cancels the instructions given in PAD 06-046 for AS 355 helicopters.</p>
Effective Date:	Proposed 31 March 2006
Compliance:	<p>The following measures are mandatory as from the effective date of this AD:</p> <p><b>1. Helicopters equipped with upper and lower fins <u>pre</u>-MOD 073288</b></p> <p><b>1.1.</b> No later than within 110 flying hours, replace the upper fin and lower fin attachment screws, in compliance with the instructions specified in paragraph 2.B.2. of referenced EUROCOPTER AS 355 Alert Service Bulletin (ASB) No. 55.00.11.</p> <p><b>1.2.</b> At intervals not exceeding 110 flying hours, check the tightening torque of the upper fin attachment screws and check the upper fin reinforcement splice for cracks and loosened rivets, in compliance with the instructions</p>

specified in paragraph 2.B.3 of referenced ASB:

a) if a crack is detected in the reinforcement splice, replace the fin, scrap the 2 attachment screws and replace them before installing a new fin, in compliance with the instructions specified in paragraph 2.B.3.a.1,

b) if the tightening torque of one or both of the attachment screws is less than 80% of the minimum torque value and/or if there is a loosened rivet, check that there is no crack in the upper fin spar, in compliance with the instructions specified in paragraph 2.B.3.a.2,

- if there is a crack in the spar, replace the upper fin, scrap the 2 attachment screws and replace them before installing a new fin, in compliance with the instructions specified in paragraph 2.B.3.a.2,

- if there is a loosened rivet, replace the loosened rivet(s), scrap the 2 attachment screws and replace them in compliance with the instructions specified in paragraph 2.B.3.a.2,

- if there is no crack and no loosened rivet, scrap the 2 attachment screws and replace them in compliance with the instructions specified in paragraph 2.B.3.a.2,

c) if the tightening torque of the 2 attachment screws is equal to or more than 80% of the minimum torque value and if there is no crack and no loosened rivet, scrap the 2 attachment screws and replace them in compliance with the instructions specified in paragraph 2.B.3.a.3.

## **2. Helicopters equipped with upper and lower fins post-MOD 073288.**

No later than within 110 flying hours and at intervals not exceeding 110 flying hours, check the tightening torque of the upper fin attachment screws and check that there is no crack and no loosened rivet in the upper fin reinforcement splice, in compliance with the instructions specified in paragraph 2.B.3. of referenced ASB:

a) if a crack is detected in the reinforcement splice, replace the fin, scrap the 2 attachment screws and replace them before installing a new fin, in compliance with the instructions specified in paragraph 2.B.3.a.1,

b) if the tightening torque of one or both of the attachment screws is less than 80% of the minimum torque value and/or if there is a loosened rivet, check that there is no crack in the upper fin spar, in compliance with the instructions specified in paragraph 2.B.3.a.2,

- if a crack is detected in the spar, replace the upper fin, scrap the 2 attachment screws and replace them before installing a new fin, in compliance with the instructions specified in paragraph 2.B.3.a.2,

- if there is a loosened rivet, replace the loosened rivet(s), scrap the 2 attachment screws and replace them in compliance with the instructions specified in paragraph 2.B.3.a.2,

- if there is no crack and no loosened rivet, scrap the 2 attachment screws and replace them in compliance with the instructions specified in paragraph 2.B.3.a.2,

c) if the tightening torque of the 2 attachment screws is equal to or more than 80% of the minimum torque value, and if there is no crack and no loosened rivet, scrap the 2 attachment screws and replace them in compliance with the instructions specified in paragraph 2.B.3.a.3.

Ref. Publications:	EUROCOPTER AS 355 Alert Service Bulletin No. 55.00.11. or later approved revisions.
Remarks:	<p>1. If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Method of Compliance (AMOCs) for this AD.</p> <p>2. The closing date for comments is 17 March 2006.</p> <p>3. Enquiries regarding this Airworthiness Directive should be referred to Mr. M. Capaccio, Airworthiness Directive Focal Point - Certification Directorate, EASA. E-mail: <a href="mailto:ADs@easa.eu.int">ADs@easa.eu.int</a></p> <p>4. For any questions concerning the technical content of the requirements in this AD, please contact: EUROCOPTER (STXI) - Aéroport de Marseille Provence 13725 Marignane Cedex - France. Tél : 33 (0) 4 42 85 97 97 - Fax : 33 (0) 4 42 85 99 66. E-mail : <a href="mailto:Directive.technical-support@eurocopter.com">Directive.technical-support@eurocopter.com</a></p>