	<b>AIRWORTHINESS DIRECTIVE</b> <b>No F-2005-053</b>	Distribution: <b>B</b>	Issue date: <b>May 11, 2005</b>	Page : <b>1/2</b>
	<b>Direction générale de l'aviation civile France</b>  <b>GSAC publication</b>	This Airworthiness Directive is published by the DGAC on behalf of EASA, Airworthiness Authority of the State of Design for the affected product, part or appliance.		<i>Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.</i>
<b>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>				
Corresponding foreign Airworthiness Directive(s): <b>Not applicable</b>		Airworthiness Directive(s) replaced: <b>UF-2005-053</b>		
Person in charge of airworthiness: <b>AIRBUS SAS</b>		Type(s): <b>A330 and A340-200/-300 aircraft</b>		
Type certificate(s) No. <b>EASA.A.004, EASA.A.015</b> TCDS No <b>EASA.A.004, EASA.A.015</b>				
ATA chapter: <b>55</b>	Subject: <b>Stabilizers - Carbon Fiber-Reinforced Plastic (CFRP) rudder</b>			

## 1. EFFECTIVITY:

AIRBUS A330-300, A340-200 and A340-300 aircraft, all certified models and all serial numbers, on which CFRP rudder PN A55471500 series is fitted,

and

any rudder PN A55471500 series held as a spare.

**Note 1:** CFRP rudder PN A55471500 correspond to the pre-modification 40904 configuration.

**Note 2:** CFRP rudder PN A55471500 has been fitted on A340-200/-300 production aircraft MSN 0001, 0002, 0003, 0004, 0005, 0006, 0007, 0008, 0009, 0011, 0013, 0014, 0015, 0016, 0018, 0019, 0020, 0021, 0022, 0023, 0024, 0025, 0026, 0027, 0028, 0029, 0031, 0032, 0033, 0034, 0035, 0038, 0041, 0043, 0044.


**Note 3:** CFRP rudder PN A55471500 has been fitted on A330-300 production aircraft MSN 0012, 0017, 0030, 0037, 0045, 0050.

## 2. REASONS:

An A310 in flight from Varadero airport (Cuba) to Quebec (Canada) experienced the physical loss of the majority of the rudder structure at cruise altitude. After a safe landing of the aircraft, an inspection showed that the rudder front spar portion between the three servo control actuators and the lower rudder hinge arm down to rib zero remained on the aircraft, the rest of the rudder was missing.

The aircraft had accumulated 13444 FC/49224FH.

The reasons and sequence that may have led to this rupture are still under investigation at the present time. The loss of the rudder leads to degradation of the handling qualities and reduces the controllability of the aircraft under certain conditions such as crosswind landings and engine-out operation.

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The CFRP rudder PN fitted on the A310 aircraft involved in the reported event is also installed on certain A330 and A340 aircraft.

The aim of this Airworthiness Directive (AD) is to check the structural integrity of the rudder and its attachment by means of a one time inspection (detailed visual inspection and tap test inspection), as a precautionary action.

**3. MANDATORY ACTIONS AND COMPLIANCE TIMES:**

The following measures are rendered mandatory from the effective date of this AD:

Within 850 flight hours or three months (whichever occurs first) from the effective date of this AD, perform inspection and apply corrective measures if necessary in accordance with the instructions specified in paragraphs 4.2.1 through 4.2.3 of AIRBUS All Operator Telex (AOT) A330-55A3035 or A340-55A4030.

Any of the inspections required in section 4.2.2 of the AOTs referenced above, which have been performed within the last 18 months prior to the effective date of this AD, is an acceptable means of compliance to the corresponding inspection of section 4.2.2 of the AOTs provided that associated inspection results are reported to AIRBUS.

In case of findings in the rudder side panels, please refer to AIRBUS Structure Engineering Customer Support for an approved repair solution before next flight.

If damage to the rudder attachment exceeds the Structural Repair Manual (SRM) limits, refer to Airbus Structure Engineering Customer Support for an approved repair solution before next flight.

The inspection results, whatever they are, must be reported to AIRBUS within 10 days from completion of all inspections defined in sections 4.2.1 through 4.2.3 of the AOT using Reporting Sheet TD 943.0273/05 Issue A, dated March 16, 2005.

**4. REFERENCE PUBLICATIONS:**

AIRBUS AOT A330-55A3035 dated March 17, 2005  
AIRBUS AOT A340-55A4030 dated March 17, 2005.

**5. EFFECTIVE DATE:**

Upon receipt of the Emergency AD issued on March 21, 2005.

**6. REMARKS:**

This AD has been the subject of an emergency diffusion on March 21, 2005.

For questions concerning the technical contents of this AD's requirements, contact:

AIRBUS SAS - Office of Airworthiness - EAL - Fax : 33 5 61 93 45 80

**7. APPROVAL:**

This AD is approved under EASA reference No 2005-2515 dated March 21, 2005.