AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Airbus Industrie A330 Series Aeroplanes

AD/A330/62 CFRP Rudder 10/2006

Applicability: All Model A330-300 aircraft, with CFRP rudder part number A55471500 series installed; and any rudder part number A55471500 series stored as a spare part.

Requirement: Action in accordance with EASA AD 2006-0124.

Note: Airbus All Operator Telex A330-55A3036, dated 2 March 2006; or later EASA approved revision, refers.

Compliance: As specified in the Requirement document.

This Airworthiness Directive becomes effective on 28 September 2006.

Background: During maintenance of an A300-600 aircraft, the carbon fibre reinforced plastic (CFRP) rudder was damaged. For damage assessment the lower rudder rib was removed. Other than the impact damage at the trailing edge location, an inner skin to honeycomb core disbond was detected at the lower skin close to the front spar. As part of the repair process, inspection revealed an area of damage on the inner skin starting at the junction between the rudder spar and the lower rib. Traces of hydraulic fluid were found in the disbonded area. Further tests showed a rapid propagation of the existing damage during artificial pressure testing. Analyses revealed reduced inner skin bonding characteristics together with limited contamination by hydraulic fluid. The rudder fitted to the A300-600 aircraft involved in this event is also installed on certain A330 aircraft.

David Villiers
Delegate of the Civil Aviation Safety Authority

17 August 2006