AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/A330/37 and issues the following AD under subregulation 39.1 (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/A330/37 Elevator Servocontrols 13/2004
Amdt 1 TX

Applicability: AIRBUS A330-200, A330-300 aircraft all serial numbers.

Requirement:

1. For elevator servocontrols installed in damping position on A330-200 aircraft only:

   Unless already accomplished, replace the O-ring seals installed on the two solenoid valves of each servocontrol by new O-ring seals in accordance with AOT A330-27A3129 Revision 01.

2. For spare elevator servocontrols which were installed on A330-200 aircraft the O-ring seals of which were not replaced as detailed in Requirement 1 of this Directive:

   Replace the O-ring seals installed on the two spare servocontrol solenoid valves by new O-ring seals in accordance with AOT A330-27A3129 Revision 01.

3. For A330-200, A330-300, aircraft:

   (a) The following operational procedure is rendered mandatory, on the ground before takeoff:

   Undetected Elevator Control Loss in case of Dual Failure

   “On ground, before takeoff until takeoff power thrust setting, apply the following procedure.

   • In the case of a F/CTL PRIM 1 FAULT, or F/CTL PRIM 1 PITCH FAULT

   Select the PRIM 1 switch to OFF then ON to perform a FCPC PRIM 1 reset

   • If successful

   Perform the normal pre-flight Flight Control check
If unsuccessful

Return to the gate and require appropriate maintenance actions.

In the case of a F/CTL ELEV SERVO FAULT or HYD G SYS LO PR

Return to the gate and require appropriate maintenance actions”.

Note 1: The incorporation of the flight manual temporary revision 4.02.00/25 issue 02 or a copy of this Directive in the aircraft operations manual and their strict application by the flight crew allows Requirement 3(a) of this Directive to be met.

(b) Introduce into the aircraft Minimum Equipment List (MEL) the following temporary revisions relevant to the manufacturer's MMEL:

- SECTION 01: A330 MMEL TR No. 01-27/01K issue 01
- SECTION 01: A330 MMEL TR No. 01-27/02K issue 01 (Enhanced A330 fitted with Rudder Fly-by-wire) and comply with these directives.

Note 2: These MMEL TRs will be introduced into the next general revision of the MMEL.

4. For all A330-200 aircraft which have received embodiment of AOT A330-27A3129 and which have not received embodiment of AOT A330-27A3129 Revision 01:

(a) Check the Part Numbers (PN) of the seals installed on the solenoid valve of the servocontrol of the elevator in damping position.

(b) If the seals installed have PN MS28775-XXX or a PN that cannot be identified, replace them with the following seals:

IPC 27-34-51-1 item 130: NAS1611-011 or NAS1611-011A
IPC 27-34-51-1 item 140: NAS1611-012 or NAS1611-012A
IPC 27-34-51-1 item 150: NAS1611-013 or NAS1611-013A
Airbus Industrie A330 Series Aeroplanes

AD/A330/37 Amdt 1 (continued)

5. For A330-200, A330-300, aircraft equipped with elevator servocontrols SC4800-2/-4/-7/-8 or SC4800-7/-8 changed to SC4800-7A/-9 by embodiment in service of AIRBUS (SB) A330-27-3076:

Replace the O-ring seals installed on the two solenoid valves of each elevator servocontrol:

- in damping position (except for the A330-200 aircraft covered by Requirement 4 of this Directive),

- in active position,

with new O-ring seals PN NAS1611-XXX or PN NAS1611-XXXA in accordance with SB A330-27A3131 or A340-27A4130.

6. For spare elevator servocontrols SC4800-2/-4/-7/-8 or SC4800-7/-8 changed to SC4800-7A/-9 by embodiment in service of A330-27-3076:

Replace the O-ring seals installed on the two spare servocontrol solenoid valves by new O-ring seals PN NAS1611-XXX or PN NAS1611-XXXA in accordance with SB A330-27A3131 or A340-27A4130.

Later DGAC approved revisions of the service bulletins and all operator telexes identified in this Directive may be used in lieu of those revisions currently detailed.


Compliance:

For Requirement 1: Before the accumulation of 3,000 flights (FC) by the servocontrol since new or 3,000 FC since the installation of the solenoid valve on the servocontrol or within 700 flight hours (FH) from the effective date of this Directive, whichever occurs later:

For Requirement 2: Before installation on an aircraft

For Requirement 3: From the effective date of this Directive.

For Requirement 4: Unless previously accomplished, before further flight.

For Requirement 5: Within 1,400 FH following the effective date of this Directive.

For Requirement 6: Before installation on aircraft.

This Amendment becomes effective on 25 October 2004.
Airbus Industrie A330 Series Aeroplanes

AD/A330/37 Amdt 1 (continued)

Background: The original issue of this Directive dealt with the incompatibility of certain “o” rings fitted to the elevator servocontrol solenoid valves that could cause malfunction of the elevator controls.

This amendment includes additional checks to be carried out prior to each flight and also details the correct parts to be fitted to the servocontrols to prevent the unsafe condition from occurring.

The original issue of this Directive became effective on 23 July 2004.

James Coyne
Delegate of the Civil Aviation Safety Authority

21 October 2004