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 39.1 (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 A319, A320 and A321 Series Aeroplanes

AD/A320/152 Auxiliary Power Unit Alternating Current Generator 4/2004

Applicability: A319, A320 and A321 series aeroplanes, all serial numbers, equipped with Hamilton Sundstrand Auxiliary Power Unit (APU) alternating current (AC) generator part number (P/N) 5906732, 5909006 or 5910047 with modification up to 17 incorporated.

Note 1: Documentation from both Airbus and the French Direction Générale de l'Aviation Civile refer to the AC generators having amendments up to 17 rather than modifications.

Note 2: No action is required by this Airworthiness Directive for aircraft that have embodied Airbus Modification 32614 during production or incorporated Airbus Industrie Service Bulletin (SB) A320-24-1106 whilst in service, provided that no generator has been replaced since the modification or SB was incorporated.

Requirement: Unless already accomplished, replace all four bolts that retain the electrical receptacle of the APU AC generator with bolts P/N 5910191-30 and lock wire the bolts in accordance with the instruction given in SB A320-24-1106 (Hamilton Sundstrand Goodrich Power Systems SB 90EGS01AG-24-18 is also applicable).

Note 3: DGAC AD F-2004-019 refers.


This Airworthiness Directive becomes effective on 15 April 2004.
Background: The DGAC has advised that an operator reported a blast in the APU compartment, that blew open the APU compartment doors, damaging aircraft’s tail cone structure and the left elevator surface.

Analysis revealed, that vibrations in APU AC generators loosened the electrical receptacle retaining bolts, which lead to oil vapor leakage. This leakage, associated with an electrical arc at the electrical receptacle, was determined to be the cause of the blast.

James Coyne
Delegate of the Civil Aviation Safety Authority

4 March 2004

The above AD is notified in the Commonwealth of Australia Gazette on 24 March 2004.