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 CAR 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.

Boeing 717 Series Aeroplanes

AD/B717/6  Spoiler Actuator Shut-Off Valve  10/2002

Applicability:  All model 717-200 series aeroplanes.

Requirement:  1. Determine the electrical resistance within the solenoid of the inboard and outboard spoiler actuator assemblies by carrying out either a spoiler actuator return-to-service (RTS) test or a spoiler system RTS test, in accordance with Boeing Alert Service Bulletin (ASB) 717-27A0025 dated 11 June 2002.

2. If any failure is noted during any Requirement 1 test, perform applicable corrective actions (including replacing the spoiler actuator assembly with a new spoiler actuator assembly and correcting all faults in the centralized fault display system), in accordance with ASB 717-27A0025, repeating the test until a successful complete RTS test has been achieved.

Note:  FAA AD 2002-16-09 Amdt 39-12848 refers.

Compliance:  For Requirement 1 - Within 60 days after the effective date of this Directive and thereafter at intervals of no more that 550 hours time in service.

For Requirement 2 - Before further flight after the Requirement 1 test.

This Airworthiness Directive becomes effective on 3 October 2002.

Background:  The United States Federal Aviation Administration (FAA) has recently been advised of failed tests of spoiler actuator assemblies due to failure of the solenoid-operated shut-off valve (SOV) on model 717-200 aeroplanes, both in service and during final assembly. Analysis by the manufacturer indicates that these solenoids contain high electrical resistance, which can be detected only during spoiler RTS tests. The presence of high electrical resistance in the solenoid is considered a latent failure and the cause of the high resistance is under investigation. The combined failure of the solenoid-operated SOV and the spoiler actuator will cause a single spoiler panel hardover, which could result in reduced controllability of the aeroplane.
Boeing 717 Series Aeroplanes

AD/B717/6 (continued)

This Directive requires the repetitive testing of either the spoiler actuator or spoiler system to detect and, if necessary, correct these faults. The FAA has advised that these actions are considered interim and further rulemaking may be necessary.

James Coyne
Delegate of the Civil Aviation Safety Authority

23 August 2002