
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/B727/100 Amdt 3 and issues the following 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.

Boeing 727 Series Aeroplanes

**AD/B727/100
Amdt 4**

Elevator Rear Spar

**11/2008
DM**

Applicability: Boeing model 727 series aircraft, line numbers 1 through 1832.

Requirement: Action in accordance with the technical requirements of FAA AD 2008-17-14 Amdt 39-15652.

Note: Boeing Service Bulletin 727-55-0089 Revision 1, or later FAA approved revision, refers.

Compliance: As specified in the requirement document.

This Amendment becomes effective on 2 October 2008.

Background: Several cases of fatigue cracking were reported. The cracking was believed to be initiated by interference between the spar flange bend radii and the sharp edges on the shear plates mounted between the spar and the elevator tab hinges.

Amendment 1 introduced SB 727-55-0087, which similarly covers the early design elevator rear spar as a result of recent Australian and overseas reports of cracking.

Amendment 2 clarified the compliance for operators of certain aircraft.

Amendment 3 was issued in response to a new FAA AD which adds new inspections to detect cracks and loose brackets of the elevator rear spar and a new terminating modification for the inspections. Reports were received of cracking in the spar radii at the tab hinge location of the elevator rear spar.

Boeing 727 Series Aeroplanes

AD/B727/100 Amdt 4 (continued)

Amendment 4 is issued due to change the requirement document from FAA AD 96-06-05 to FAA AD 2008-17-14. This directive reduces the repetitive intervals of the inspections, mandates the previously optional terminating action for the repetitive inspections and no longer allows stop-drilling. The FAA received further reports of cracks, elongated fastener holes, and loose fittings of the elevator rear spar. This directive is issued to prevent cracking of the elevator rear spar at the tab hinge locations, which could cause excessive freeplay of the elevator control tab and possible tab flutter, and consequent loss of control.



David Villiers
Delegate of the Civil Aviation Safety Authority

2 September 2008