


EASA	EMERGENCY AIRWORTHINESS DIRECTIVE	
	<p>EAD No : 2007-0107-E</p> <p>Date: 18 April 2007</p>	
<p>No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.</p>		
<p>Type Approval Holder's Name:</p> <p>Short Brothers PLC</p>	<p>Type/Model designation(s):</p> <p>SD3-60</p>	
<p>TCDS Number: United Kingdom TCDS BA11</p>		
<p>Foreign AD: Not applicable</p>		
<p>Supersedure: This AD supersedes United Kingdom CAA AD G-2005-0013, EASA Approval Number 2005-4317.</p>		
<p>ATA 55</p>	<p>Stabilisers – Elevator Trim Tab Balance Weight Brackets – Inspection / Repair / Replacement</p>	
<p>Manufacturer(s):</p>	<p>Short Brothers PLC</p>	
<p>Applicability:</p>	<p>SD3-60 aircraft, all serial numbers</p>	
<p>Reason:</p>	<p>There have been several occurrences of cracked elevator trim tab balance weight attachment brackets, on one occasion the elevator trim tab mass balance weight bracket separated from the aircraft. The loss of an elevator trim tab mass balance weight bracket has the potential to cause damage to an aircraft, or cause serious injury to personnel. The CAA United Kingdom published AD 009-06-2003 to require the detection and replacement of defective elevator trim tab mass balance weight brackets. Following the discovery during a scheduled maintenance input of cracked elevator trim tab mass balance weight bracket on an aircraft modified in accordance with AD 009-06-2003, another Airworthiness Directive G-2004-0032 was considered necessary, this required inspection and timely replacement of the newly installed brackets. Investigation by the Type Certificate Holder (TCH) determined the new brackets were not manufactured in conformity with the applicable design data. The non-conforming brackets were all manufactured in 2003 and 2004.</p> <p>A batch of non-conforming brackets manufactured in 2003 and 2004 were reworked by the manufacturer and were considered as fully conforming brackets. Several of these 'reworked brackets' have also exhibited signs of premature failure, attributed to the welding operation required as part of the rework. Testing has confirmed a reduced service life for this standard of bracket which is now considered unsuitable for new installation and, if</p>	

	<p>installed, is subject to the same inspection program as the non-conforming brackets. 'Reworked' brackets can be identified by markings on the brackets as detailed in Service Bulletins SD360-55-20 and SD360-55-A21.</p> <p>Airworthiness Directive G-2005-0013 superseded AD 009-06-2003 and AD G-2004-0032 and combined the necessary corrective actions into a single AD. The present Emergency AD supersedes CAA United Kingdom AD G-2005-0013, and addresses the issue of 'reworked' brackets. It also combines the necessary corrective actions into a single AD that assures the correct standard of elevator trim tab mass balance weight brackets are installed.</p>
<p>Effective Date:</p>	<p>20 April 2007</p>
<p>Compliance:</p>	<p>A) For aircraft fitted with new part number SD3-07-6011xA elevator trim tab balance weight brackets manufactured in the years 2003 or 2004, including re-worked brackets, either installed in accordance with Part B of Shorts Mandatory Service Bulletin SD360-55-20 initial issue (CAA-UK AD 009-06-2003) or Rev 1, or installed in accordance with Shorts Alert Service Bulletin SD360-55-A21 initial issue (CAA-UK AD G-2004-0032 or G-2005-0013):</p> <p>(1) Within 30 Flight Hours (FH) after the effective date of this directive, or within 250 FH since new (installation) or since the last inspection as required by previous ADs, whichever occurs later, and thereafter at intervals not to exceed 250 FH, inspect the elevator trim tab balance weight brackets in accordance with Part A of Shorts Alert Service Bulletin SD360-55-A21 Rev 1;</p> <p>(2) Prior to the accumulation of 1,750 FH since new or installation, replace the elevator trim tab balance weight attachment brackets with fully conforming brackets, manufactured in the year 2005 or later, in accordance with Part B of Alert Service Bulletin SD360-55-A21 Rev 1 or later EASA approved revision;</p> <p>B) For aircraft fitted with part number SD3-31-6213xB elevator trim tab mass balance weight brackets previously inspected in accordance with Shorts Service Bulletin SD360-55-20 initial issue (AD 009-06-2003) or Rev 1 and retained or refitted following approved repair in accordance with Part B of this Service Bulletin:</p> <p>(1) Within 4,800 FH since last inspection and thereafter at intervals not to exceed 4,800 FH, inspect the elevator trim tab brackets in accordance with Shorts Service Bulletin SD360-55-20 Rev 2;</p> <p>(2) Prior to the accumulation of 28,800 FH since new, replace the elevator trim tab balance weight support brackets with fully conforming brackets, manufactured in the year 2005 or later, in accordance with Part B of Shorts Service Bulletin SD360-55-20 Rev 2.</p> <p>C) Cracked brackets revealed as a result of any inspection required by this AD must be replaced before further flight with new fully conforming brackets, manufactured in the year 2005 or later, in accordance with Part B of Alert Service Bulletin SD360-55-A21 Rev 1, or Shorts Service Bulletin SD360-55-20 Rev 2.</p> <p>D) After the effective date of this AD, no person may install an Elevator trim tab on any aircraft unless it has been inspected to ensure that the elevator trim tab balance weight brackets have been replaced with fully conforming brackets, manufactured in the year 2005 or later, in accordance with Part B of Alert Service Bulletin SD360-55-A21 Rev 1, or Shorts Service Bulletin SD360-55-20 Rev 2.</p>

	<p>E) For aircraft with elevator trim tab balance weight brackets that have been replaced with fully conforming brackets, manufactured in the year 2005 or later, in accordance with Part B of Shorts Service Bulletin SD360-55-A21 Rev 1, or SD360-55-20 Rev 2, no further action is required by this AD.</p>
<p>Ref. Publications:</p>	<p>Short Brothers PLC Service Bulletin (SB) SD360-55-20 Rev.2 and SB SD360-55-A21 Rev.1, or later approved revisions of these documents.</p>
<p>Remarks:</p>	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Methods of Compliance (AMOC) for this AD. 2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification. 3. Enquiries regarding this Emergency AD should be referred to the AD Focal Point, Certification Directorate, EASA, e-mail ADs@easa.europa.eu 4. For any questions concerning the technical content of the requirements in this AD, please contact: Airworthiness, Short Brothers PLC, PO Box 241, Airport Road, Belfast, BT3 9DZ Northern Ireland, United Kingdom; Telephone +44(0)2890-462469; Fax +44(0)2890-468444; e-mail michael.mulholland@aero.bombardier.com