

<b>EASA</b>	<b>EMERGENCY AIRWORTHINESS DIRECTIVE</b>	
	<p><b>AD No.: 2007 – 0108 -E</b></p> <p><b>Date: 18 April 2007</b></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><b>Type Approval Holder's Name :</b> EADS-CASA</p>	<p><b>Type/Model designation(s) :</b> C-212-Series aeroplanes</p>	
<p>TCDS Number : Spain 01-82/8</p>		
<p>Foreign AD : not applicable</p>		
<p>Supersedure : EASA EAD 2006-0365-E</p>		
<b>ATA 57</b>	<b>Wings - Centre Wing Lower Skin - Inspection</b>	
<p>Manufacturer(s):</p>	<p>EADS-CASA (formerly Construcciones Aeronauticas S.A.)</p>	
<p>Applicability:</p>	<p>C-212 aeroplanes all Series all serial numbers.</p>	
<p>Reason:</p>	<p>On 23 November 2006, Emergency Airworthiness Directive Nr. 2006-0351-E was published, requiring an inspection to be performed on C-212 aeroplanes having been used for Maritime Patrol or other similar low altitude operations, due to the fact that, after initial examination of the evidences of a recent C-212 Maritime Patrol aircraft accident, cracks had been found in the centre wing lower skin at STA Y=1030. At the time of the accident, the aircraft had accumulated 17,000 flight hours and 7,300 flight cycles. The cracks were suspected to be caused by fatigue.</p> <p>A more detailed examination in the laboratory, led to think that the initiation of the fatigue cracks was produced by fretting, and EAD 2006-0365-E, superseding EAD 2006-0351-E, was published on 4 December 2006 to address the new situation.</p> <p>Further examination in the laboratory has allowed to establish that crack initiation was due to fatigue and the fretting was posterior. Additionally, given that some operators were reporting difficulties in performing the required inspections, a new procedure has been defined using High Frequency Eddy Currents. Finally, an inspection interval has been established to make the required inspections repetitive in the interim until a</p>	

	<p>definitive solution is available.</p> <p>The subject element is identified in Ref. 1 as a Principal Structural Element (PSE) with No. 57.212.06 and requested to be inspected at a threshold of 20,000 landings (subject to some operational constraints defined in Ref. 1) in accordance with the inspection method and sequence described in Ref. 2, Section 57-10-03.</p> <p>Ref. 1 document was made mandatory by DGAC-Spain Airworthiness directive Nr. 02/88 (current status of that AD is revision 3, dated 4 February 2004).</p> <p>Inspection threshold as per AD 02/88 Rev. 3 remains valid and relevant inspections have to be performed in addition to the requirements of this Emergency Airworthiness Directive (EAD).</p> <p>The above mentioned cracks, if not timely detected, could lead to reduced structural integrity of the aircraft. This EAD is intended to ensure that no other C-212 aircraft could be affected by this problem, by mandating a one time inspection of the subject area, and a repetitive inspection thereafter, until the moment a definitive design solution will be available, in accordance with the requirements under the paragraph "Compliance" of this EAD.</p> <p>An additional inspection procedure, by using High Frequency Eddy Currents, has been introduced, which should be able to detect cracks with higher reliability.</p>
Effective Date:	20 April 2007
Compliance:	<p>For aeroplanes used for operations other than commercial transport (including but not limited to Maritime Patrol operations or other similar low altitude operations):</p> <ol style="list-style-type: none"> <li>1. Aircraft having accumulated more than 8,000 flight hours or 3,600 landings at the effective date of this Emergency Airworthiness Directive: <ul style="list-style-type: none"> <li><u>First inspection:</u> <ul style="list-style-type: none"> <li>- Before further flight, perform Non Destructive Inspection (NDI) in accordance with Ref. 2, Section 57-10-03, unless already performed in accordance with EAD No. 2006-0351-E or EAD No. 2006-0365-E.</li> <li>- Before further flight, perform Non Destructive Inspection (NDI) in accordance with the "Complementary inspection" procedure to the Ref. 2 Section 57-10-03, sequence 2, defined in Annex 1 of Ref. 3, unless already performed in accordance with EAD No. 2006-0365-E.</li> <li>- Before further flight, perform High Frequency Eddy Current Non Destructive Inspection (HFEC NDI) defined in Annex 3 of Ref. 3 unless the Non Destructive Inspections required by EAD No. 2006-0365-E had been already performed.</li> </ul> </li> <li><u>Repetitive inspections:</u> <p>Repeat the above inspections before accumulating 600 flight hours or 250 landings, whatever occurs first, from the first inspections, and repeat them periodically thereafter before accumulating 600 flight hours or 250 landings (whatever occurs first) from the previous inspection.</p> </li> </ul> </li> </ol>

2. Aircraft having accumulated more than 5,600 flight hours or 2,400 landings at the effective date of this Emergency Airworthiness Directive:

First inspection:

- Before accumulating 200 flight hours or 100 landings (whichever occurs first) from the effective date of this Emergency Airworthiness Directive, perform Non Destructive Inspection (NDI) in accordance with Ref. 2, Section 57-10-03, unless already performed in accordance with EAD No. 2006-0351-E or EAD No. 2006-0365-E.
- Before accumulating 200 flight hours or 100 landings (whichever occurs first) from the effective date of this Emergency Airworthiness Directive, perform Non Destructive Inspection (NDI) in accordance with the "Complementary inspection" procedure to the Ref. 2 Section 57-10-03, sequence 2, defined in Annex 1 of Ref. 3, unless already performed in accordance with EAD No. 2006-0365-E.
- Before accumulating 200 flight hours or 100 landings (whichever occurs first) from the effective date of this Emergency Airworthiness Directive, perform High Frequency Eddy Current Non Destructive Inspection (HFEC NDI) defined in Annex 3 of Ref. 3 unless the Non Destructive Inspections required by EAD No. 2006-0365-E had been already performed.

Repetitive inspections:

Repeat the above inspections before reaching a threshold of 8.000 flight hours or 3.600 landings (whichever occurs first), and repeat them periodically thereafter before accumulating 600 flight hours or 250 landings (whatever occurs first) from the previous inspection.

For aeroplanes used in commercial transport operations:

1. Aircraft having accumulated more than 15,000 flight hours or 15,000 landings at the effective date of this Emergency Airworthiness Directive:

First inspection:

- Before further flight, perform Non Destructive Inspection (NDI) in accordance with Ref. 2, Section 57-10-03, unless already performed in accordance with EAD No. 2006-0351-E or EAD No. 2006-0365-E.
- Before further flight, perform Non Destructive Inspection (NDI) in accordance with the "Complementary inspection" procedure to the Ref. 2 Section 57-10-03, sequence 2, defined in Annex 1 of Ref. 3, unless already performed in accordance with EAD No. 2006-0365-E.
- Before further flight, perform High Frequency Eddy Current Non Destructive Inspection (HFEC NDI) defined in Annex 3 of Ref. 3 unless the Non Destructive Inspections required by EAD No. 2006-0365-E had been already performed.

Repetitive inspections:

Repeat the above inspections before accumulating 4.500 flight hours or 4.500 landings, whatever occurs first, from the first inspections, and repeat them periodically thereafter before accumulating 4.500 flight hours or 4.500 landings (whatever occurs first) from the previous inspection.

	<p>2. Aircraft having accumulated more than 10,000 flight hours or 10,000 landings at the effective date of this Emergency Airworthiness Directive:</p> <p><u>First inspection:</u></p> <ul style="list-style-type: none"> <li>- Before accumulating 200 flight hours or 100 landings (whichever occurs first) from the effective date of this Emergency Airworthiness Directive, perform Non Destructive Inspection (NDI) in accordance with Ref. 2, Section 57-10-03, unless already performed in accordance with EAD No. 2006-0351-E or EAD No. 2006-0365-E.</li> <li>- Before accumulating 200 flight hours or 100 landings (whichever occurs first) from the effective date of this Emergency Airworthiness Directive, perform Non Destructive Inspection (NDI) in accordance with the "Complementary inspection" procedure to the Ref. 2 Section 57-10-03, sequence 2, defined in Annex 1 of Ref. 3, unless already performed in accordance with EAD No. 2006-0365-E.</li> <li>- Before accumulating 200 flight hours or 100 landings (whichever occurs first) from the effective date of this Emergency Airworthiness Directive, perform High Frequency Eddy Current Non Destructive Inspection (HFEC NDI) defined in Annex 3 of Ref. 3 unless the Non Destructive Inspections required by EAD No. 2006-0365-E had been already performed.</li> </ul> <p><u>Repetitive inspections:</u></p> <p>Repeat the above inspections before reaching a threshold of 15.000 flight hours or 15.000 landings (whichever occurs first), and repeat them periodically thereafter before accumulating 4.500 flight hours or 4.500 landings (whatever occurs first) from the previous inspection.</p> <p>A ferry flight in order to position the aircraft to a place where appropriate facilities for inspection will be available is allowed.</p> <p>In any of the cases above, if any crack or loosen rivet is detected, no further flight is allowed. A detailed report should be sent to EADS-CASA (see address below) for evaluation.</p> <p>In any case, a confirmation of the accomplishment of these inspections is required to be sent to EADS-CASA.</p>
Ref. Publications:	<p>Ref. 1: C-212 Supplemental Inspection Document (SID) C-212-PV-02-SID.  Ref. 2: C-212 Supplemental Inspection Procedures (SIP) C-212-PV-02-SIP.  Ref. 3: EADS-CASA AOL 212-018, revision 2, dated 20 March 2007.</p>
Remarks :	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Methods of Compliance (AMOCs) for this AD.</li> <li>2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification.</li> <li>3. Enquiries regarding this AD should be addressed to the AD Focal Point, Certification Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a> .</li> <li>4. For any question concerning the technical content of the requirements in this AD, please contact:  EADS-CASA, Military Transport Aircraft Division  Integrated Customer Services, Technical Services</li> </ol>

	<p>Avenida de Aragón 404, 28022- MADRID, SPAIN Phone 34-91-624-6306 ; Fax 34-91-585-5505 E-mail: <a href="mailto:MTA.TechnicalService@casa.eads.net">MTA.TechnicalService@casa.eads.net</a> .</p>
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