EASA EMERGENCY AIRWORTHINESS DIRECTIVE AD No.: 2007-0181-E Date: 02 July 2007 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. Type Approval Holder's Name: Type/Model designation(s): **SIAT 223** EADS DEUTSCHLAND GmbH TCDS Number: LBA Germany No. 679 Foreign AD: Not applicable. Supersedure: LBA AD (LTA) D-2005-200 (EASA approval number 2005-5853 of 13 June 2005) and LBA AD (LTA) D-2005-200R1 (issued under provisions of art. 10.1 of the EU Basic Regulation 1592/2002) Wings –Wing Structure - Inspection / Repair / Modification / **ATA 57** Replacement Manufacturer(s): EADS DEUTSCHLAND GmbH (formerly Siebelwerke ATG) Applicability: SIAT 223 V, SIAT 223 A1 and SIAT 223 K1, all Serial Numbers. Reason The left wing of a SIAT 223 K1 broke off at the junction with the fuselage during aerobatic flight. A first analysis of the event suggested that the lower chord of the main strut had possibly been already damaged due to structural overload during previous aerobatic operations. The resultant crack had grown over time until the rupture occurred. The actions specified by LBA Airworthiness Directive (AD) D-2005-200 were intended to prevent further in-flight separation mandating a wing inspection and repair as per the approved EADS Deutschland repair instructions in case cracks or loose rivets were detected.

Based on information gathered during further investigation of the occurrence, LBA airworthiness directive D-2005-200R1 was issued to introduce a threshold of 1900 wing total flight hours for the accomplishment of the AD mandatory requirements, and to limit the aircraft operations to

This AD, superseding AD D-2005-200 and D-2005-200R1, is issued to introduce a new threshold of 1200 flight hours, to mandate accomplishment of the approved modification no. AE-SIAT223-01/2006 for wings exceeding the threshold of 1900 total flight hours, and to introduce additional repeat inspection intervals as per EADS Deutschland Service Bulletin 223-05/07.

normal category for those aircraft exceeding such threshold.

Compliance:	From the effective date of this AD the following applies, unless already
Compilance.	accomplished:
	All airplanes on which the wing has exceeded 1.200 total flight hours but is less than 1900 total flight hours are grounded, prior to the accomplishment of one of the following:
	a) Inspection of the wing as required by the manufacturer inspection specification EADS-MAN-NDT-2079. In case of cracks or loose rivets are detected, perform wing modification as per EADS Deutschland job instruction EADS-MAN-MOD-SIAT223 or repair as per the approved EADS Deutschland repair instructions.
	or
	b) Installation of a new wing.
	Note: If the life time of the wing cannot be determined, the aircraft total flight hours have to be considered.
	2. All airplanes on which the wing has exceeded 1.900 total flight hours are grounded prior to the accomplishment of the wing modification as per EADS Deutschland job instruction EADS-MAN-MOD-SIAT223.
	3. All airplanes on which the wing has exceeded 1200 total flight hours and has been inspected in accordance with paragraph 1. but not modified as per EADS Deutschland job instruction EADS-MAN-MOD-SIAT223, can be operated in the normal category only. All aerobatic manoeuvres are prohibited. The airplane holder has to place a placard in the cockpit, clearly visible for the pilot, stating: "Any aerobatic manoeuvre is not allowed!" and a copy of this AD has to be put in the Aircraft Flight Manual. The accomplishment of the modification as per paragraph 2. above allows to use the aircraft in aerobatic category also.
	4. Additional repeat inspections above 1900 total flight hours have to be performed in accordance with EADS Deutschland Maintenance Manual SIAT 223 (Doc. No. TF-4 D1), change 4.
	5. When the wing total flight hours are 9800 or more, the wing has to be permanently removed from service.
Effective Date:	04 July 2007
Ref. Publications:	EADS Deutschland Service Bulletin 223-05/07 dated 31.05.2007;
	EADS Deutschland Inspection Specification EADS-MAN-NDT-2079;
	EADS Deutschland job instruction EADS-MAN-MOD-SIAT223.
Remarks:	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.
	The safety assessment has requested not to implement the full consultation process and an immediate publication and notification.
	 Enquiries regarding this Airworthiness Directive should be referred to the AD Focal Point – Certification Directorate, EASA. E-mail: ADs@easa.europa.eu.
	 For any questions concerning the technical content of the requirements in this AD, please contact: EADS Deutschland GmbH - Military Air Systems 85077 Manching - Federal Republic of Germany Tel.: +49 (0)8459 81-65018 - Fax: +49 (0) 8459 81-65169