


South African Civil Aviation Authority SACAA	EMERGENCY AIRWORTHINESS DIRECTIVE	
 <p>SOUTH AFRICAN CIVIL AVIATION AUTHORITY</p>	<p>RSA AD No: 2018-001 Ref :J15/9/3</p> <p>Issued Date: 06 December 2018</p> <p>The unsafe condition requires the immediate adoption of this AD. We found that publishing of a notice and opportunity for public comment before issuance of this AD are impracticable, and that good cause exists for making this AD effective in 3 days from date of issue: Effective Date: 09 December 2018</p>	
	<p>This AD is issued in accordance with SACAR Part 11, read together with SACAR Part 21 and is relevant to SACAR Part 43, continued airworthiness of an aircraft shall be ensured by accomplishing any applicable AD's. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with an exemption issued by the Director of Civil Aviation (DCA) in terms of SACAR Part 11.</p>	
<p>Design Approval Holder Name: Hartzell Propeller Inc.</p> <p>TYPE CERTIFICATE DATA SHEET (TCDS) No: B1900D (P10NE) B1900C (P56GL)</p> <p>Foreign AD: Not Applicable</p> <p>Supersedure: None</p>	<p>Type/Model Designation (s): Hartzell Composite Propeller Blade Families on Beechcraft 1900 aeroplanes</p>	
ATA – Propeller - Debonding Of Propeller Erosion Protection Shield From Leading Edge – Inspection / Replacement		
<p>Manufacturer (s):</p>	<p>Hartzell Propeller Inc.</p>	
<p>Applicability:</p>	<p>This AD applies to Hartzell Composite Propeller Blade Families installed on, but not limited to, Beechcraft 1900 aeroplanes fitted with propellers which have attained at least 2000 hours since last overhaul.</p> <p>Note: The parentheses appearing in the propeller model number indicates the presence or absence of an additional letter(s) that varies the basic propeller model. Regardless of whether or not these letters are present or absent in the propeller model designation, this AD will apply.</p>	

<p>Reason / Unsafe Condition:</p>	<p>During an investigation on a B1900 D aeroplane, debonding of the erosion protection shield from propeller blade leading edge was found. Further inspection revealed that the manufacturers overhaul / maintenance requirements may not have been fully adhered to when applying the erosion shield to the propeller blade leading edge. Subsequent to the overhaul / maintenance being performed, the evidence shows that the propeller was exposed to excessive heat that may have caused the debonding.</p> <p>All or one of the aforementioned events could lead to the unsafe debonding condition described above is likely to exist or develop on leading edge erosion shields on Hartzell Composite Propeller Blade Families installed on B1900 aeroplanes. It is for this reason that the AD is important, to prevent erosion shield separation in-flight, vibration and damage to the aeroplane, and possible loss of control resulting in injury.</p>
<p>Required Interim Action (s) and Compliance Time (s):</p>	<p>The actions required in terms of this AD are interim actions and the Director may take further rulemaking action in future, hence compliance is required as indicated, unless previously accomplished:</p> <p>A. Manufactures requirements complied with:</p> <p>All Owners and Operators are to ensure that the propeller overhaul / major repairs of installing the leading edge erosion shields on composite blade families installed on B1900 aeroplanes shall be carried out in accordance with Hartzell Propeller Inc. Composite Propeller Blade Field Maintenance and Minor Repair Manual 170 and Hartzell Maintenance Manual for Composite Propeller Blades 135F.</p> <p>(i) LOCTITE EA 9330 AERO Epoxy Paste Adhesive (known as Hysol EA 9330) shall not be procured from any private supplier and only from Hartzell Propeller Inc. Any AMO in possession of Hysol EA 9330 procured from private suppliers, must desist from utilising the product immediately. Only stock of Hysol EA 9330 procured from Hartzell Propeller Inc. is allowed to be used;</p> <p>(ii) Upon receipt of LOCTITE EA 9330 AERO Epoxy Paste Adhesive stock from Hartzell Propeller Inc, all AMO's are to ensure that the storage and handling procedures as detailed in Henkel Corporation Material Safety Data Sheet are fully complied with.</p> <p>B. Manufactures requirements not complied with:</p> <p>(i) If evidence exists that LOCTITE EA 9330 AERO Epoxy Paste Adhesive was procured from private suppliers, or there is non-compliance with storage and handling procedures. Owner and Operators are required to recall all affected propellers immediately and ensure appropriate rectification action is taken in accordance with Hartzell Propeller Inc.</p>

	<p>Composite Propeller Blade Field Maintenance and Minor Repair Manual 170 and Hartzell Maintenance Manual for Composite Propeller Blades 135F.</p> <p>(ii) If evidence exists that LOCTITE EA 9330 AERO Epoxy Paste Adhesive was procured from private suppliers, or that non-compliance with storage and handling procedures. Owners and Operators are required to report such information to the Director urgently in the interest of safety.</p> <p>(iii) For propellers with 2,000 or more operating hours' time since last overhaul (TSO), blade surface coin-tap test inspections must initially be conducted within 3 days of the effective date of this AD, and the test shall be conducted in accordance with Hartzell Propeller Inc. Composite Propeller Blade Field Maintenance and Minor Repair Manual 170 and Hartzell Maintenance Manual for Composite Propeller Blades 135F. Thereafter the coin-tap test shall be performed every 200 operating hours' after the initial test so as to ensure early detection of delamination or debonding.</p>
<p>Related Information and remarks:</p>	<p>Dispensation may be granted to Owners or Operators which propellers were overhauled and or major repairs carried out in accordance with Hartzell Propeller Inc. Composite Propeller Blade Field Maintenance and Minor Repair Manual 170 and Hartzell Maintenance Manual for Composite Propeller Blades 135F before the effective date of this AD. However, they must be able to show proof that the LOCTITE EA 9330 AERO Epoxy Paste Adhesive used was acquired directly from Hartzell Propeller Inc and that, storage and handling requirements were complied with.</p> <p>Owners and or Operators are responsible for having actions required by this AD performed within the compliance time of prescribed effective date, unless they have been granted dispensation by the Director.</p> <p>This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment, however, the Director invites you to send any written relevant data, views, or arguments regarding this AD.</p> <p>Enquiries for more information regarding this AD should be referred to the Consistency and Standardisation Department (CSD), SACAA at contact details:</p> <p>Email: sdr@caa.co.za www.caa.co.za</p>