



SAFETY ALERT

No: SA 2020.01

Date: 10.07.2020

Subject: DUC Windspoon carbon fibre propeller hub



Background

On the 16.06.20 an ELA gyroplane suffered propeller failure whilst operating near Quobba Station in WA. A forced landing followed revealing significant damage to the gyroplane. Fortunately, there were no injuries.

A minor propeller vibration was detected followed by a loud bang as the propeller hub disintegrated. The gyroplane “bucked”, throttle was set to idle, fellow pilots in area were advised by radio and the pilot commenced an immediate autorotation to the ground. Damage was consistent with the carbon fibre propeller hub disintegrating. Propeller bolts were lock wired and tight at pre-flight. The propeller hub had been in service on the ELA gyroplane for 385 hrs and greater than 10 years in service. A significant number of ELA gyroplanes are fitted with this propeller and hub type.

Alert

Owners and operators are required to be aware of the recommended time before overhaul (TBO) found in Section 5 of the Windspoon Propellers Instruction Manual (DUC Propellers, 2016).

The manufacturers documentation recommends a TBO of 800 hrs, however it may not exceed 5 years in service (Flight School 2 yrs.). It is recommended that the propeller is sent back to the manufacturer for inspection.

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Please refer to the manufacturer's documentation inserted below.



WINDSPOON

5. Potential use & Maintenance of the propeller

5.1. Potential use of the propeller: Unlimited

The DUC propellers have an unlimited flight potential in normal operation.

To keep the unlimited potential, DUC Hélices has defined a TBO (Time Between Overhaul) for a propeller depending on its engine. This TBO according the engine is indicated in this manual (see 3. **Applications**). In all cases, it may not exceed 5 years. When more intensive use (flight school ...), the value of the TBO can be doubled maintaining control at least every 2 years.

Jeff Blunt
ASRA Operations Manager.