PFA AIRWORTHINESS INFORMATION



MANDATORY CHANGE TO WOODCOMP KLASSIC PROPELLERS TO REPLACE ANY BLADES PRIOR TO SERIAL NUMBER 600.

Applicability:

All aircraft fitted with Woodcomp propellers which are operated on Permits to Fly issued on PFA recommendation. These propellers are commonly fitted to Zenair type aircraft but are also fitted to certain other types of aircraft.

Compliance: Before next flight.

Background:

Chordwise cracking has occurred in the composite blades of several Woodcomp type propellers. The manufacturer introduced a design change in 2001 which was intended to avoid these cracks occurring, which involved extending the internal tubular spar. While the manufacturer considers these cracks to be cosmetic, PFA is concerned that cracks could extend into the structural part of propeller lay-up if cracked propellers were to continue in service. PFA is therefore mandating the removal of any Woodcomp propeller blades of the original design standard, and replacement with blades of the improved design.

Actions required:

- 1. Check the blade part numbers, which appear on stickers fixed to the blades. The part number is of the format 1-600-68-3R, where the first digit is the year of manufacture (2001), second, third and fourth digit comprise the serial number (ie in this case, 600).
- 2. If the serial number of any blade is <u>post year 2001 and post serial 600</u>, the blade may continue to be used. Make an entry in the Aircraft logbook stating that the aircraft complies with airworthiness information PFA MOD/Prop/04-005 and that blades after 2001, of serial number greater than 600 were found fitted.
- 3. If the serial number of any blade is less than <u>serial number 600</u> and manufactured during or prior to <u>2001</u>, carry out an engine ground run and record max static engine rpm. Remove the propeller from the aircraft, measure the propeller blade pitch using a propeller pitch gauge and record blade pitch figure, record position of each blade in the hub. Dismantle the propeller and fit new blades with serial number of 600 or above, in accordance with the Woodcomp instructions.
- 4. Set blade pitch as previously, torque clamping bolts to specified torque using a torque wrench and balance propeller in accordance with Woodcomp assembly instructions.
- 5. Reassemble propeller to aircraft in accordance with Rotax engine installation instructions.
- 6. PFA inspector to check assembly of propeller and assembly of propeller to aircraft in accordance with instructions, and carry out engine ground run to check max static engine rpm are within +/- 50 RPM of previously recorded figure and freedom from excessive vibration.

Inspection Requirements:

The owner may the verify the blade part number by inspection and make the appropriate Airframe log book entry. However, any further work carried out must be checked by a suitably approved PFA inspector prior to next flight. In this case an Airframe logbook entry to be raised and signed by the inspector confirming compliance with PFA airworthiness information MOD/Prop/04-005. Where the inspection action at No1 reveals that no further work is required and the entry is made by the owner, an Inspector must countersign this entry prior to the next permit renewal.