

Title: Woodcomp Propeller Balancing	
AG-SIL-2020-03-EN	Released:
Applicability	30 Nov 2020
Aircraft type & model: All AutoGyro models	Affected Serial number(s): All AutoGyro models fitted with a Woodcomp propeller
The maintenance manual to be referenced is this stated or subsequent issue.	As per AutoGyro website
This form is the response from AutoGyro GmbH either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation. For help, contact AutoGyro on 49(0)5121 88056-00, or email airworthiness@auto-gyro.com.	

Documentation (Service Information Letter completion action)

The purpose of this document is to provide maintenance personnel with information over and above that currently available in the relevant AMM. Its compliance must be properly documented, if such procedure is required by the relevant authority

Chief Certification Officer	Chief Technical Officer
G. Speich	O. Birkner

Reason and overview of the Service Information Letter

This SIL has been released to provide a process for dynamically balancing the Woodcomp propeller on respective AutoGyro models of gyro that it may be fitted to, should it be necessary. This information relates to both the KW-30 and KW-31 models of propeller.

Woodcomp propellers are statically balance by the manufacturer, and dynamic balancing is not mandatory. However, Woodcomp recommends performing this procedure after each new installation to the engine and/or aircraft.

Basic balancing information can be found in the Woodcomp **Overhaul and Medium Repair Of KW-30 Propeller TN-21** section **7. Balance**. This is available on request from Woodcomp info@woodcomp.cz

The process described within this instruction used the Smart Avionics PB4 balancing equipment, however any suitable propeller balancing equipment may be used.

Manpower estimates

It is estimated that this task should take on average 1.5 hrs.

Compliance

Not applicable.

Customer Support

Not applicable.

Tooling required

Standard tools.
Suitable propeller balancing equipment.
Standard personal safety equipment required for carrying out a ground run.

Weight and Balance Effects

Nil

Manuals affected

POH & AMM AutoGyro is not affected.

Previous Modifications that affect the SIL

None

Instructions

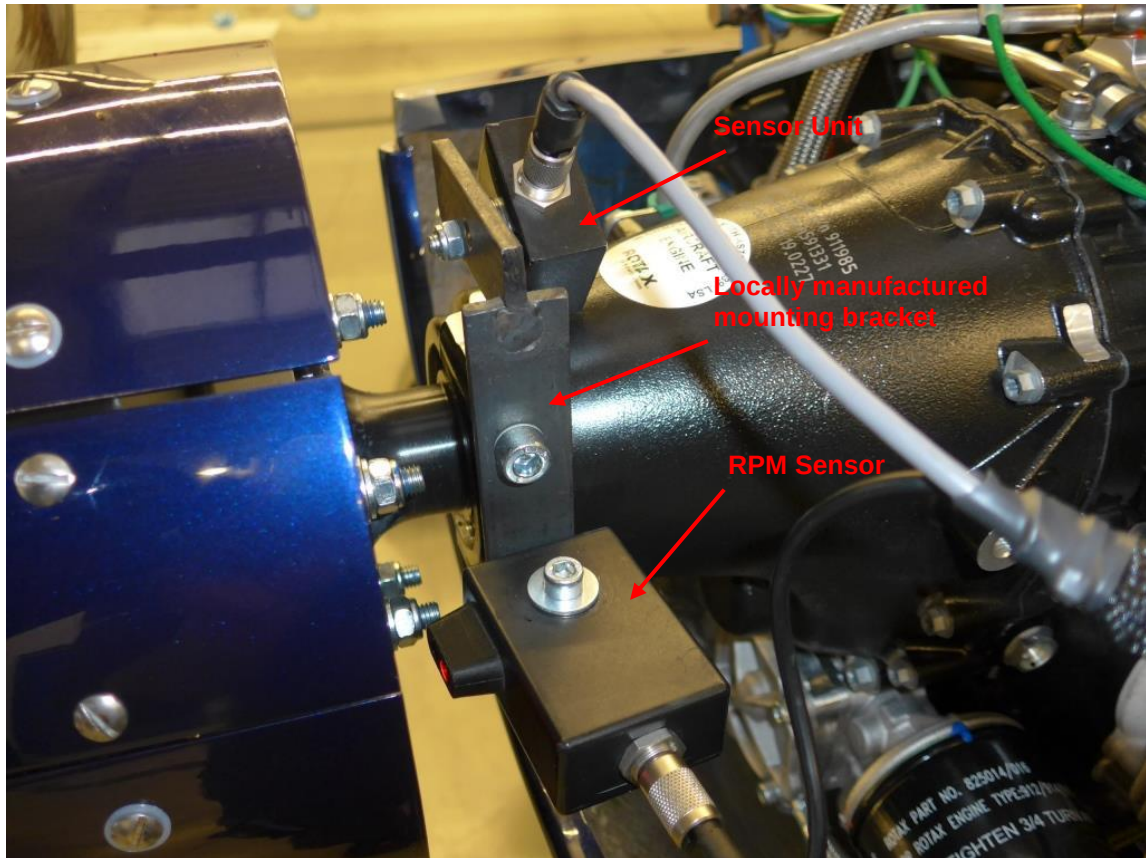
The following instructions explain the procedure for balancing a Woodcomp propeller using the Smart Avionics PB4:

1. Before proceeding with balancing, ensure the spinner is fitted and secure, and that its orientation marks are aligned.
2. Check torque the attachment propeller to hub attachment bolts in accordance with the manufacturer's manual for the propeller type.
3. Remove any cowlings required to allow fitment of the balancing equipment as described in the relevant balancing equipment user handbook. For the PB4 this can be found under https://smartavionics.co.uk/pb4/pb4_hw_manual.pdf and https://smartavionics.co.uk/pb4/pb4_ui_manual.pdf. An example of how this may be fitted to the Rotax engine propeller gearbox can be seen in Pic. 1. & 2.
4. Ensure all cables are routed securely and safely away from any rotating/moving parts and extreme heat in such a way to allow the user interface to be operated away from danger areas.
5. Secure the aircraft in a suitable, safe area to allow a ground run to be undertaken.
6. Start the engine and allow to reach normal operating temperature.
7. Set the propeller pitch to achieve 5000 rpm at a fuel flow of 25-27 lt/hr and take balance readings. Stop engine.
8. Note the readings on the propeller balancing worksheet at appendix A.
9. Calculate the amount of weight required to balance, using standard 2.5g and 5g wheel balancing weights (Pic. 3). Balance trials carried out at AutoGyro has shown that a 2.5g weight reduces IPS by approximately 0.04.
10. Degrease the area inside the flange of the spinner attachment plate at the determined position and attach the calculated amount of weight required (Pic. 4). Record the weight and position in the form at appendix A.
11. Carry out the balance procedure in steps 4 to 8 and make any further adjustments required to reach the Woodcomp acceptable limit of 0.15IPS, recommended under 0.07IPS.
12. Once a satisfactory result has been achieved, remove the weight, degrease the area and either attach a new weight of the same mass or fit a nut and bolt of the required mass in accordance with the Woodcomp overhaul manual section 7.
13. Remove the balance equipment and re-fit any previously removed cowlings.
14. Carry out a tool and loose article check.
15. Ensure results are recorded and attached or referenced in the aircraft logbook as required.

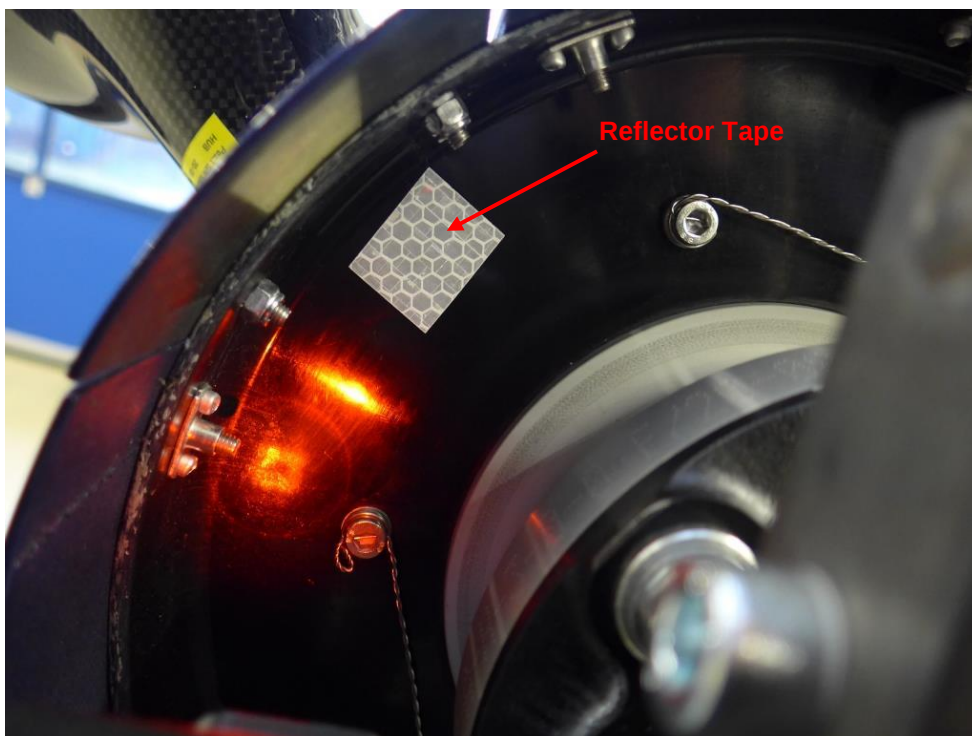
NOTE:

Inadequately cleaned adhesive surfaces or poor adhesion may lead to the detachment of the self-adhesive weight, and possible subsequent damage. Due to the variabilities of adhesives, cleaners, and the effectiveness of the cleaning undertaken, AutoGyro cannot accept any responsibility for any resultant damage.

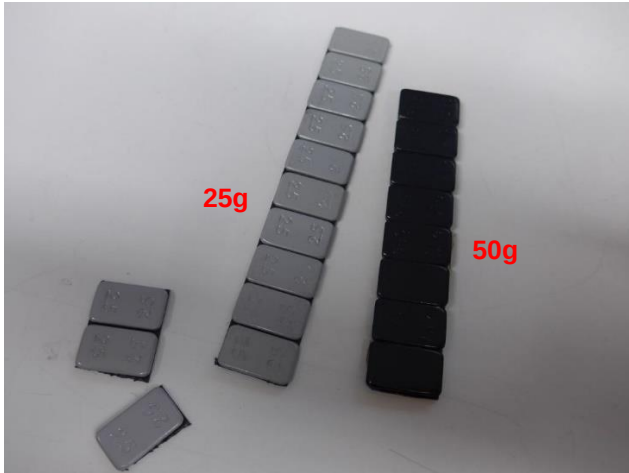
Illustrations



(Pic. 1)



(Pic. 2)



(Pic. 3)



(Pic. 4)

Material information (Parts required relevant to this service information letter):

Nil

List of components (with purchasable part numbers)

Nil

Interchangeability

Not affected

Parts disposition

- a) Disposal requirements – Nil
- b) Environmental hazards of parts containing hazardous materials – Nil
- c) Scrap requirements (e.g. mutilate scrapped items beyond use) – Nil

Appendix A

Aircraft Worksheet – Propeller balance

Aircraft serial number:

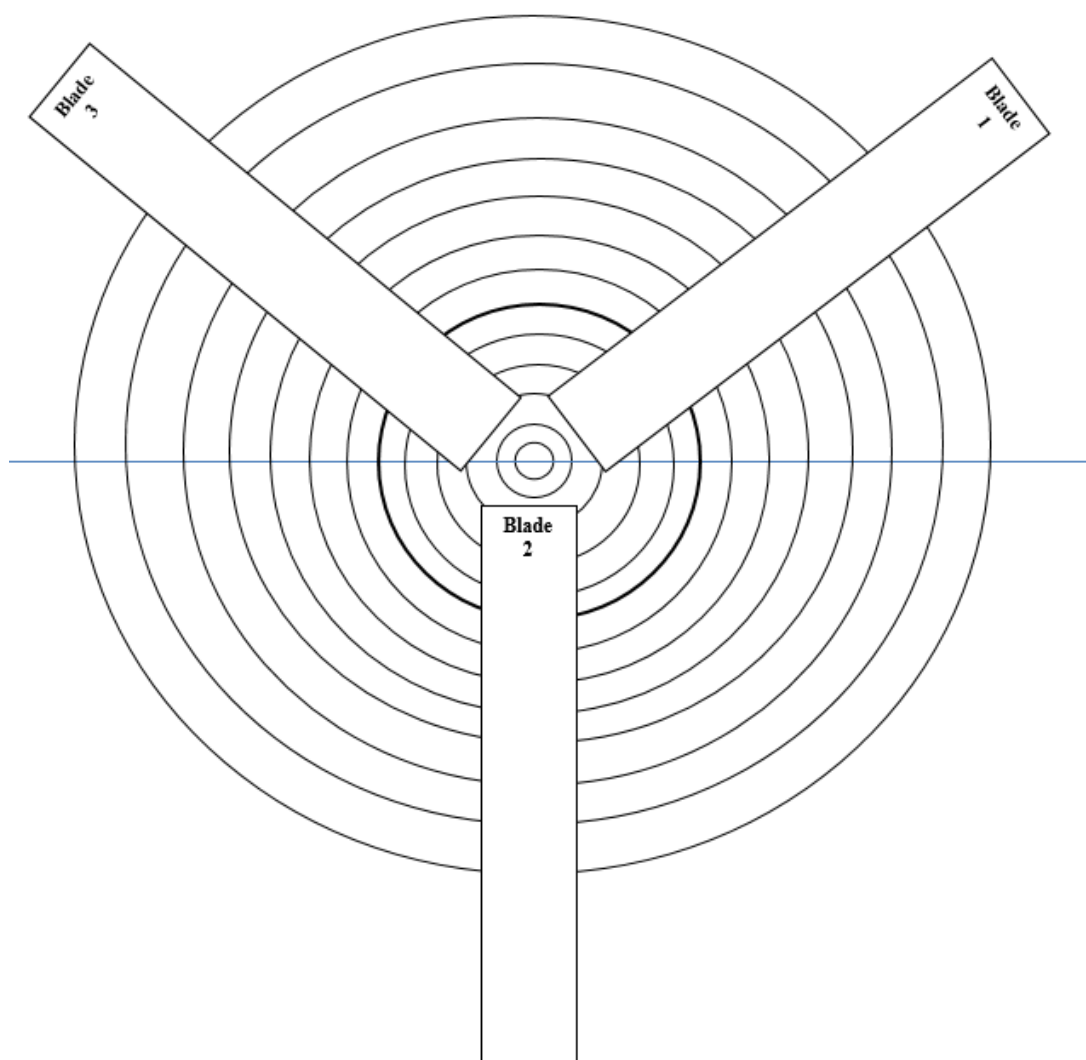
Location:

Purpose – to record actions required to balance rotors.

Maintenance manual referred to (issue level/date):

Document reference:

Propeller s/n:



Trial	1	2	3	4	5	6	7	8	9	Notes
Weight										
Position										
IPS										