

Propeller/Blade set serial No:		IVO-prop DL3 VP Propeller		Aircraft registration no. G-	
		Initial 25hr & 100hr Service Worksheet		Aircraft serial no. RSUK/ Worksheet date:	
Task No.	Task Description	Repetition or comments	Actions taken & comment	Eng'r initial	Cert initial
Purpose of this worksheet: To be applied for the first 25hr service and subsequent 100hrs service of IVO-prop variable pitch propeller as fitted to RotorSport Gyroplanes. If prior to permit renewal, the owner is also referred to Permit renewal requirement list on the RSUK website. Refer to manual RSUK0325. Some of the checks and serviceability are 'on condition', meaning the Engineer has the responsibility to decide if it is acceptable for service. NOTE! Unless this service incorporates an annual inspection, checks for CAP747, 661, BG01, BG02 and EASA are optional.					
	Installation Inspection				
1	Thoroughly clean the propeller before inspection then remove the spinner (if fitted), taking note of its location markings.				
2	Check – propeller assembly firmly attached to fwd hub-half.	6-off hex-head bolts properly tightened into (captive) nyloc nuts. Torque 40Nm. Torque mark between each bolt end and nut			
3	Check – torque marks showing correct attachment of fwd hub-half to engine (torque mark between each screw thread and prop flange)	6-off csk screws through hub-half into top-hat bushes in engine flange. If in doubt remove propeller and check torque of screws 25Nm.			
4	Check – brush-mount bracket firmly attached to engine	2-off M8 fastener with friction washer			
5	Inspect brushes, replace if broken or worn by more than 5 mm. OEM length is 10mm	Brush length may be determined in-situ by visual inspection through the translucent brush carrier.			
6	Check for slip ring wear and cleanliness, and security	Brush-wear-groove max depth 0.2mm			
7	Check the slip ring separating insulators for cracks or damage	No cracks or protrusions acceptable			
8	Check – brush carrier firmly attached to bracket and brushes running centrally on slip-rings.				
9	Inspect blades for any damage, splits etc. Repair only as per maintenance manual RSUK0325.				

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10	Inspect integrity of stainless-steel leading edge protector on each blade. Replace if necessary.	Loose or poorly adhered protector degrades propeller performance. Ensure it is properly adhered!			
11	For each blade in turn check security of the blade in the hub.	Must be secure – if loose, check bolts and attachment.			
12	Spare				
13	Using the manual selector (rocker) switch and monitoring the LED's, set propeller to fine limit. Set each blade in turn to horizontal (& use inclinometer on hub flange) Check pitch angle of each blade at the tip.	Maximum blade to blade difference 1.5deg.	Record blade pitch angle Blade 1 Blade 2 Blade 3 Hub angle		
14	Using the manual selector switch and monitoring the LED's set propeller to coarse limit. Set each blade in turn to horizontal (& use inclinometer on hub flange) Check pitch angle of each blade at the tip.	Maximum blade to blade difference 1.5deg.	Record blade pitch angle Blade 1 Blade 2 Blade 3 Hub angle		
15	Replace spinner, if fitted.	Use Loctite 243 on the retaining screws Ensure plastic washers in place under screw heads.			
16	Using the manual selector (rocker) switch and monitoring the LED's set propeller to fine limit. Listen for untoward noises.	Leave at fine limit for subsequent ground run. If untoward noises are heard, investigate and resolve.			
	Final ground run checks prior to release				
17	Warm up engine with pilot in front seat. At an engine speed 3000rpm cycle propeller manually from fine to coarse stops and verify audible change in engine note and correct sense of rocker switch. Leave the prop set at the fine limit.				
	Complete the release documentation				

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18	Ensure all log book entries completed appropriately						
Confirm Service bulletins incorporated (from RSUK website, full list available with applicability)							
Confirm Mandatory Permit Directives incorporated (from CAA website, CAP747 and 661)							
CAP 747 Document date or issue checked, plus notes:							
CAP 661 Document date or issue checked, plus notes:							
EASA MPD or AD check (EASA website): note date checked and any actions required							
Confirm compliance to BG04 Iss1, Type Approval data sheet for the Calidus. Note any non compliances and actions taken.							
Tasks completed by (name): Signature: _____ Initial: _____ check sheet) _____ (to compare to _____ Date: _____				Engine hours logged: Propeller hours logged Airframe hours logged: Aircraft hourmeter hrs logged:			

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Permit Maintenance Release: The work recorded above (all pages) has been completed to my satisfaction and in that respect the aircraft is considered fit for flight. Signature: _____ Initial: _____ _____ (to compare to check sheet) Date: _____ Inspector or licence no.: _____ Company Approval ref _____ Inspector Authority: CAA letter ref 9/ _____ dated _____				Comments: 	
Note to Engineer; remember to reference this worksheet and RSUK0061 within the logbooks, together with your CAA authorisation code. Work undertaken may be noted on this worksheet, or if required on another sheet (such as F093) also referenced in the logbook. Modifications undertaken must be noted with their MC approval no. Check the back pages to complete these too for modifications, service bulletins, MPDs, etc.					

Requirements for certifying signatures/initials on this worksheet

With the exception of “Permitted Pilot Maintenance” (see the relevant RSUK Aircraft Maintenance Manual and CAA publication CAP 733), all maintenance work on RSUK gyroplanes must be certified by a CAA A3-7 Authorised Person.

Case 1: for work not involving engine controls, or flying controls, or vital structural points

The person(s) performing the work should complete the worksheet columns as below:

- If the person completing “Eng’r” does not have A3-7 authorisation there must be a second initial by an A3-7 authorised person in each adjacent “A3-7 certifier” cell, denoting acceptance of the task specified.
- If the person has A3-7 authorisation the “Eng’r” cell should be struck out and a single entry of initials made in the A3-7 certifier cell

Case 2: for work where engine controls, or flying controls, or vital structural points are disturbed, where a duplicate inspection is required (and shown in the worksheet).

The person(s) performing the work should complete the worksheet columns as shown above and repeated below:

- If the person completing “Eng’r” does not have A3-7 authorisation there must be a second initial by an A3-7 authorised person in each adjacent “A3-7 certifier” cell, denoting acceptance of the task specified.
- If the person has A3-7 authorisation the “Eng’r” cell should be struck out and a single entry of initials made in the A3-7 certifier cell

In addition to the above there is a requirement for inspection, then duplicate inspection (by an independent person) of the finished task:

- The A3-7 engineer certifying the task must enter his name, CAA authorisation number, and full signature under “1st inspection”.
- The independent second person must enter his name, CAA authorisation number or Pilots Licence number, and full signature under “2nd inspection”.

This second person must be suitably qualified and may be:

- another A3-7 authorised engineer
- a qualified gyroplane pilot. In this case the pilot must append his Pilot’s Licence number to his signature.

It is the second signatory’s responsibility to ensure he/she understands the task and what it is they are inspecting and signing for.

Verification of Initials, Signature and Authorisation

The person performing the work must complete the “Tasks completed by” statement towards the end of the worksheet.

The A3-7 authorised engineer must complete and sign the “Permit Maintenance Release” on the last page of the Worksheet.

NOTE! WHERE THE AIRCRAFT IS MAINTAINED BY ANOTHER UK CAA APPROVED ORGANISATION FOR THE PURPOSES OF PERMIT RENEWAL, (eg THE LAA) THEN THE TERM A3-7 IS REPLACED BY THE APPROVED PERSON DESIGNATION FROM THAT ORGANISATION.