Aircraft serial no. RSUK/CVLN/	**Aircraft 100hr/Annual Repetitive Service Worksheet** **NB: Take note of hours/time related actions** Unique worksheet no. (if required/used):	Aircraft registration no. G- Worksheet date: Worksheet type: 100HR / ANNUAL (delete as appropriate)

Tsk No.	Task Description	Repetition or comments	Actions taken & comment	Eng'r initial	Certifing person
Purpose of this worksheet: To be applied for the first 100hrs of operation and every subsequent 100hrs or Annually, whichever occurs sooner, to a Cavalon Gyroplane with fixed pitch propeller. If prior to Permit renewal, the owner is also referred to the Permit renewal requirement list on the RSUK website. **This document covers the Cavalon aircraft with fixed pitch propeller, refer to Maintenance Manual RSUK0288.** **Most of the checks and serviceability are 'on condition', meaning the Engineer has the responsibility to decide if an item is acceptable for service.** **NOTE! Cowls and covers must be removed to undertake this service. Refer to Cavalon Pilots Handbook RSUK00287 for guidance.** **The task numbers listed in the left-most column are rationalised i.e. identical on all Cavalon Service Worksheets. The task numbers may not be sequential**					
	Preparatory work				
1	Review the aircraft documents (and the list of publications towards the end of this Worksheet) to determine any outstanding, specific or additional requirements to be conducted.				
2	Remove the rotor and place on three trestles pending further work. Replace the teeter bolt, shim washers and nut in the teeter tower in their original locations.	Consult Cavalon POH RSUK0287 or Cavalon AMM RSUK0288 for technique. Note the use of "dot-marks"			
3	Clean the aircraft, remove any dirt, dust, loose items. During cleaning inspect for any fluid leaks.				
4	Perform an external visual inspection of all cowlings and mast covers. Record any cosmetic damage on the graphic at the end of this document then remove the items. Perform a detailed inspection (no cracks, distortion, missing parts).	**Consult RSUK to organise any repairs or replacements required**			
5	Remove keel-tube cover, leaving loose on tube				

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6	Remove all service covers (external), inspection hatches (internal) and the removable firewall panel. Perform a detailed inspection (no cracks, distortion, missing parts).	**Consult RSUK to organise any repairs or replacements required**			
7	Lift stick gaitor(s) away from the Velcro retention to cockpit floor				
8	Release the centre console, lift clear but leave the controls attached.	Consult Cavalon AMM RSUK0288 and note the hidden screw accessed through the left wall of the centre-tunnel for the heater control lever.			

	Airframe Inspection				
10	Check - Bolt torques – mast fittings	Torque-check the M8 countersunk screws to 22Nm (2 pairs). If any visible movement remove screw, re-Loctite 243 and replace tightening to 25Nm+/-3Nm. Second signature required if any screw removed/replaced.	1st inspection Name: A3-7 authorisation no: Sig:…….. 2nd inspection Name: A3-7 authorisation no: Or, qualified pilot licence no: Sig:……		
12	Inspect – mast rubber bushings for failure or free play, fastenings for security, and any sign of wear or damage between the upper mast side plates and lower mast. Check bush integrity by pulling the rotor head forwards with a 15Kg load. Movement is 5mm maximum, measured relative to the lowest point of the windscreen surround.	Note that bush fastenings are secured with Loctite 638, which will require heat to remove! **If cracks or deformation found then ground aircraft and call RSUK for advice.**			
13	Inspect – upper mast for damage, twisting, buckling or other deformation, or cracks, especially at welded joints.	**If cracks or deformation found then ground aircraft and call RSUK for advice.**			
14	Inspect – Condition of keel-tube and security of attachment to composite body (Screws and band-clamp) Check tail-plane horizontal (i.e. keel-tube not twisted)	**If cracks or deformation found then ground aircraft and call RSUK for advice.**			
15	Inspect – keel-tube protection pads condition and attachment.	Two pads may be fitted. Replace if worn – see Cavalon AMM RSUK0288			

16	Inspect - External structure of body sound with no cracks, distortion or damage. Pay particular attention to the lower mast area around the air-intake duct.	**If cracks or deformation found then ground aircraft and call RSUK for advice.**			
	Undercarriage – main gear and brakes				
20	Inspect - landing gear spar and attachments to body for damage or fatigue (cracks & deformation).	**If cracks or deformation found then ground aircraft and call RSUK for advice.**			
21	Inspect – wheel spats general condition, security of mounting and tyre clearance.				
22	Inspect – main wheels general condition, correct pressure, condition of tread, correct seating of valve and cap, secure installation, free movement but no play in wheel bearings, presence and condition of creep-mark on tyre/rim	No fabric to show through the tread area. Recommended 0.5mm min tread No cracks in side-walls Tyre pressure 1,8 to 2,2 bar (latter if heavily loaded)	Tyres OK and pressures recorded as: Main LH…….. Main RH……..		
23	Inspect – wheel brakes for secure installation and correct operation, no fluid leaks from caliper.				
24	Inspect - for brake pad wear. Replace as necessary, and if less than 2mm pad remaining. There is a wear indicator slot in the centre of the pad. If the slot is not visible, then the pad should be replaced	If calipers are sticking or uneven wear is found, loosen/turn wheel bolts and check for straightness – if OK retighten. Alternatively, clean brake pad bushes & lubricate calipers around seal			
25	Inspect – brake lines for secure installation, no leaks or chafing				
26	Inside a/c examine the centre-console: Inspect – all fastenings (including jam-nuts) secure. All mechanisms move smoothly and correctly without interfrence				
27	Service/lube – change brake fluid	Recommended at 3years, or when brakes become spongy. Refill from master cylinder with callipers immersed in fluid. If system is spongy after bleeding, check discs for flatness and wheel bolts for straightness.			
28	Inspect – brake ratchet pawl for excessive wear. If found, replace.	Teeth of lever must not be visibly deformed or protrude less than 1.5mm.			

29	Inspect – condition of and no leaks from coolant hoses attached to water-valve.				
30	Refit centre console using Loctite 243 on the screw attaching the heat control to the water-valve.				
	Undercarriage – nose-wheel				
40	Inspect – wheel spat for general condition, security of mounting and tyre clearance				
41	Inspect - nose-wheel general condition, correct pressure, condition of tread, correct seating of valve and cap, secure installation, free movement but no play in wheel bearings.	No fabric to show through the tread area. Recommended 0.5mm min tread No cracks in side-walls Tyre pressure 2,0 to 2,4 bar (latter if heavily loaded)	Tyre OK and pressure recorded as: Nose……		
42	Inspect - nose-wheel fork for general condition, secure installation, freedom of movement, no excessive play, distortion or damage				
43	Inspect - nose-wheel rubber damper general condition and correct operation				
	Electrical/instruments				
50	Inspect – panel mounting screws secure				
51	Inspect - panel connections for security				
52	F/C – slip indicator	Confirm slip-string undamaged and free-moving			
53	Inspect - Confirm all placards readable and in line with Operating Limitations	See Cavalon POH RSUK0287 for placards required (or the CAA publication TADS)			
54	Check - aircraft weight and balance	No annual check required, but confirm weighing certificate available and matches weight shown on placard			
55	Inspect – gel battery for security of mounting, casing leakage and state of charge	If required connect ground-power to fully charge battery in anticipation of tests later in this Worksheet			
56	Op/C Check strobe function				

57	Op/C check nav light function	Port=red, Stbd=green, Rear=white (if equipped)			
58	Op/C check landing light function				
59	Op/C check backup (electric) fuel pump functions				
60	F/C - ASI calibration	Check pitot and static systems as per Cavalon AMM RSUK0288 system checks sect 9			
61	F/C – altimeter calibration	Check pitot and static systems as per Cavalon AMM RSUK0288 system checks sect 9			
62	F/C – compass calibration	Cross check to handheld compass			

65	F/C Engine instruments	**The engineer may wish to defer the five checks below until the final ground run checks are conducted (towards the end of this worksheet)**			
	Engine RPM	At tick-over compare with hand-held digital tachometer. Readings to be within 100rpm.			
	Engine CHT	Warm-up engine then stop. Using hand-held digital temperature indicator compare surface temperature adjacent to sensor. Readings to be within 10ºC			
	Engine Oil temperature	Warm-up engine then stop. Using hand-held digital temperature indicator compare surface temperature adjacent to sensor. Readings to be within 10ºC			
	Engine oil pressure	Check zero with engine stationary then rising to a minimum of 2 bar at 4000rpm. Alternatively (and depending on sensor type fitted), temporarily disconnect the cable from the pressure sensor and using a suitable resistor (600-690ohms) apply 12VDC @ 20mA to the signal lead (A6 Yellow/green). The gauge should read FSD. Reconnect the cable.			
	Engine datalogger (914UL only)	Optionally, Turbo TCU data (where fitted) may be downloaded for analysis			

66	F/C Rotor rpm gauge (annual)	On flight test confirm usual indications at pre-rotate and cruise conditions in the actual take-off configuration – see Cavalon POH RSUK0287 section 5.1) Alternatively, in a safe area, activate the pre rotator. Use a hand held tachometer aimed at the rotor/head & compare readings of rotor rpm to the tacho. Readings to be within 25rpm			
67	Op/C – Avionics checks	Transponder – Check that mode S code matches G-INFO database. At each bi-annual inspection a full functional check is required, using an Aeroflex IFR6000 test-set or equivalent to confirm correct transponder function including correlation with a/c altimeter. Radio – confirm PTT buttons cause 'T' on panel. (NB: Further checked for transmit and receive quality on Annual flight-test)	Transponder code required to be transmitted: Actual code transmitted transponder code: Where possible, print out transponder test report and attach to service docs		
68	Op/C – Fire-warning system Check that power-up lamp test, simulated fault and simulated fire-warnings are displayed	See Cavalon AMM RSUK0288			
	Rotor head				
70	Renew main bearing	Replace bearing at 1500hrs (no extension permitted). Bearing bolt torque 150Nm+/-20Nm Confirm split pin correctly fitted NOTE: when tightening hub onto backing plate ensure that the clearance between the main gear and bendix gear is minimised from 0.05 to 0.15mm Clearance of rotor speed sensor to gear is 1 to 2mm (confirm function via tacho) NOTE: set sideways position of had in rotorbridge before tightening iaw RSUK0288.	1st inspection Name: A3-7 authorisation no: Sig:……. 2nd inspection Name: A3-7 authorisation no: Or, qualified pilot licence no: Sig:……		
71	Op/C – Ring gear security and bolt attachment	Note any wear patterns			

72	Lubricate rotor brake pivot.	WD40 or similar			
73	Inspect – brake pad for function.	Pad replaceable as a service item			
74	Op/C – Check roll and pitch Trim cylinders for free function and slider damage or excess seal leakage.	Seal service kit is available from RSUK			
76	Check, Service/lube – teeter bolt & bearings for damage & wear.	Regrease via nipple on top of rotor (where fitted). Grease with Castrol LM or equivalent If wear or signs of distress, inspect and replace bushes or bolt if required. Clean, regrease & refit. Excess wear is more than 0.5mm of vertical play, bolt to bushes, and will cause rotor vibration Removal, clean, inspect and refit is recommended every 100hrs.			
77	Check, bushes in tower sides. If worn, replace	Small sideways float between hub bar and bushes required for low vibration			
78	Service/lube –gimbal joints, check for wear & regrease.	Grease with Castrol LM or equivalent. If wear evident or noticeable looseness, disassemble gimbal joints, check for wear, regrease and reassemble. Torque up bolts to clamp side plates to gimbal block iaw RSUK0288. Strip and inspect recommended every 200hrs of operation			
79	Inspect – teeter stop plate securely attached to teeter tower and plastic teeter stops securely attached to plate	7mm thick stops			

80	Overall check all attachment hardware secure and verify 3-off split pins in place and correctly formed.	Split pins are fitted to main bearing bolt, pitch bolt and roll bolt. This check is required even if no disassembly actions have been conducted. **NB: The teeter-bolt's split pin is fitted and checked under "Rotor" later in this worksheet**	1st inspection Name: A3-7 authorisation no: Sig:…….. 2nd inspection Name: A3-7 authorisation no: Or, qualified pilot licence no: Sig:……		
	Rotor Head Controls				
81	F/C – rod ends for cracks & freedom of movement both free and at control extremes				
82	F/C- rotor head reaches pitch and roll stops Inspect – pitch and roll angles achieved	For limits and methods see Cavalon AMM RSUK0288			
83	Inspect – pitch and roll cable attachments to upper mast secure				
84	Inspect (inside a/c) – all bearings free, all bearing retaining rivets secure, Pushrods, attachments and pivot mountings secure with no damage or chafing. Electrical cables and connectors undamaged.				
85	Service/lube – lubricate bearings and ball joints with Ballistol oil				
86	Inspect – push/pull cable mountings secure with no chafing.				
87	Op/C – for free play in stick control eg bearings or cable wear				
88	Inspect – stick forces in pitch and roll	For limits and methods see Cavalon AMM RSUK0288			
	Nose-wheel and Rudder controls				
90	Op/C – Check pedals for ease of movement	Check from each seat			

91	Inspect – tension of cable between central control link (mixer unit) and nose-wheel link and re-tension if required. Check turnbuckles secured and no chafing of cables.	See Cavalon AMM RSUK0288.			
92	Service/lube – lubricate pedal bearing and sliding block of adjuster with Ballistol oil				
93	Inspect – visible rudder cables for frays, corrosion, wear or chafing, and any crimped fittings for signs of movement. Lubricate cables with Ballistol oil.				
94	Inspect – all clevis joints at central control link (mixer unit) secured, free to move and no chafing.				
95	Inspect – central control link (mixer unit) freedom of movement and main bolt secured.	Access main bolt through rubber plug located centrally underneath body			
96	Inspect – security of wire-locking retaining the rudder cables to the keel-tube.				
97	Inspect – tail rod-end bearings for looseness and freedom of operation and fitted with snubbing washers. Lubricate control cables with Ballistol oil				
98	Inspect – integrity of tail attachment lugs welded to keel-tube (4-plcs)	Use 10x magnifying glass and suitable illumination to check for cracks on outside of the joint.			
99	Inspect – tail for security to airframe (4-bolts).	Torque-check the M8 bolts to 12Nm (4-plcs). If any visible movement remove each bolt, re-Loctite 243 and replace, tightening to 15Nm Second inspection required if any bolt removed/replaced.	1st inspection Name: A3-7 authorisation no: Sig:……. 2nd inspection Name: A3-7 authorisation no: Or, qualified pilot licence no: Sig:……..		

100	Inspect – rudder to tail fastenings. Inspect tail and rudder for signs of composite damage and cleanliness of drain holes.	Torque-check the single M6 or M8 bolt at the top bearing. If any visible movement remove bolt, re-Loctite 243 and replace: M6 test at 8Nm, fit to 10Nm M8 test at 10Nm, fit to 12Nm Second inspection required if bolt removed/replaced.	1st inspection Name: A3-7 authorisation no: Sig:…….. 2nd inspection Name: A3-7 authorisation no: Or, qualified pilot licence no: Sig:……..		
101	F/C rudder control cable tension (pedal load check)	For limits and methods see Cavalon AMM RSUK0288	Gauge number…… Reading……		
102	Inspect – rudder control angles	For limits and methods see Cavalon AMM RSUK0288	Gauge number…….		
103	Overall check that all control system bolts are correct items, properly fitted and tight				
	Engine **NOTE! All engine checks to be in accordance with manufacturers manual!**	For engine servicing refer to the engine manual issued with the aircraft (Rotax 912ULS or 914UL). The full annual engine service is required only when no engine servicing has been carried out in the last 12 months. Otherwise apply ‘on condition’. Servicing must be carried out in line with, and recorded on, the Rotax service schedule contained within the ‘Line Maintenance’ manual for the engine fitted.			
110	Engine service fasteners	If the magnetic inspection plug or the crankshaft locking screw plug are disturbed then any wire-locking present must be properly reinstated			
111	Wirelocking – ensure present on oil tank drain plug, Oil banjo under engine, carb air filter(s), oil pump				
	Engine, other				
112	Service/lube – Ensure choke and throttles move freely from stop to stop, and that turbo detent can be felt correctly. Ensure cables are synchronised.	HSC2000spray grease or equivalent			
113	Inspect – engine mount rubbers for deterioration	With 914UL engine check clearance between airbox and mounting frame.			

114	Inspect engine bearer bolts for paint stripe, and if moved, re-loctite and tighten to 35Nm. Otherwise check bolt torque. Re-apply paint stripe as required.				
115	Inspect – oil cooler general condition, security of mountings, no leaks or cracks in fittings.				
116	Inspect – all oil hoses and pipes for secure installation, no leaks, chafing, hardening of pipes or abrupt direction changes. Check condition of heat-insulating tubes under engine.				
117	Inspect – oil thermostat assembly for secure attachment, no cracks or leaks from fittings.				
118	Inspect – all coolant hoses for condition and secure installation, no leaks, chafing or porosity.				
119	Inspect – condition of heat protection on coolant hose from Cylinder #2.				
120	Inspect – coolant radiator for secure installation, cleanliness, leaks or damage				
121	Inspect – radiator fan for correct operation, no damage to cage or blades	Fan runs in reverse direction to ram airflow with engine stopped on-ground. Fan runs in direction of ram-airflow with engine running.			
122	Inspect – coolant overflow tank for correct coolant level, secure installation, no chafing	Use dipstick for coolant level. See Cavalon POH RSUK0287			
123	Inspect – exhaust system for general condition, secure installation, no leaks, cracks or loose rivets. For 912ULS engine check security of tension springs and safety cable. For 914UL engine check security of turbocharger installation	Use tap-test to inspect for cracks			
124	Inspect – after-muffler clamp rubber strips for deterioration and secure fitment and that wire-locking in place (2-plcs)				

	Fuel system				
130	Inspect – security of fuel tanks and fuel cross-over tube/clamps. No evidence of leakage in fuel tank compartment.	Fuel tanks are bonded in place with flexible mastic.			
132	Service/lube – Drain any water in the fuel tanks via the water drain valve, confirming correct function and closure. Drain crossover tube by removing drain valve only if required to remove significant water or debris from main tanks. After reassembly verify correct operation and sealing of fuel-drain valve	If removed, seal thread with PTFE tape or equivalent, ensuring minimal overlap over the plug end. Wirelock after refitting	1st inspection Name: A3-7 authorisation no: Sig:…….. 2nd inspection Name: A3-7 authorisation no: Or, qualified pilot licence no: Sig:……..		
133	Service/lube – Inspect nylon fuel filters/strainers where fitted (912ULS - external nylon filter plus electric pump integrated strainer) (914UL two electric pump integrated strainers), plus two nylon pre filters where fitted, plus KL145 post pump filter.	Recommended every 200hrs, or more frequently if fuel contamination suspected			
134	Inspect – fuel cap for condition, tightness, correct function, security of restraining cable and cleanliness of vent hole.				
135	Inspect – breather pipe for blockage.				
136	Inspect – in area protected by removable firewall and in engine compartment check all fuel lines for condition, secure installation, presence of fire-protective sleeve, no chafing or kinks.	Check ends of hoses where expanded over fittings.			
137	Inspect – security and function of electric fuel pump(s)	Function determined by sound on operation			
138	Op/C – correct operation and security of fuel shut-off valve, correct operation of safety-guard				

139	Op/C – functionality of fuel gauge	ie that the reading is consistent with that shown on the tank dip-stick			
140	Op/C – functionality of low-fuel warning lamp	Drain fuel (by siphon or by electrical pump) until level below sensor in RH tank (nom 5 litres).			
	Pre rotator				
141	Inspect – security of gearbox and pneumatic pipe to pre-rotator clutch.				
142	Inspect- drive shafts for bend or damage. No bearing play, corrosion or cracks in flanges of u/j couplings	Clean as required (use a kitchen plastic scouring pad) and protect with oil or chain wax			
143	Op/C – Cycle by hand thru full range – check drive shaft joints for free movement and bearings for play etc.				
144	Inspect – security of pneumatic cylinder (on rotor head)				
145	Inspect – bendix to ring-gear engagement. Adjust if necessary	See Cavalon AMM RSUK0288			
146	Service/lube – Lubricate Bendix gear & spiral gear	WD40 or similar only. Do not use grease!			
147	Service/lube – clean then apply a minimal smear of light oil or WD40 to ring gear teeth				
148	Service/lube – sliding shaft coupling with grease and verify free movement	Castrol LM or equivalent			
149	Service/lube –uppermost drive shaft protected with Waxoyl	Apply with brush, do not spray.			

	Trim System, Rotor Brake & Pneumatics				
160	Inspect – all hoses for leaks and slave cylinder for looseness				
161	Change (or dry out) compressor water absorber.	Recommended to be changed at 500hrs			
162	Inspect – compressor. Listen for undue noises in operation and confirm automatic cut-out at 8 bar system pressure. If continuous running or <7bar achieved either find air-leak or replace compressor		Note pressure obtained		
163	Op/C – Full functional check, pneumatic system – refer as required to the maintenance manual for fault finding and rectification, and a more comprehensive understanding of the test background. REPEAT TEST FOR LEFT STICK (IF FITTED TO AIRCRAFT)	In the 'Brake' position, engage brake, confirm operation, and that function is acceptable. Pressurise to maximum. Change to flight – check for 8 sec max to release air from brake system. In 'Flight' position check that trim goes on and off in same direction as button. In 'Flight' position move stick fully forward. Depress pre rotator button. Ensure the rotor head cylinder engages, and pump runs – and when the stick is pulled back the pump stops. Return the stick to the front, release pre rotator and confirm that pressure is applied to trim and stick comes back slightly. Press right roll and ensure stick then moves right and bar indicator does the same. Repeat to left, then centralise indicator – and check for stick return to mid position. In 'Brake' position, put 3 bar pressure on and ensure pre rotator does not function Press the 'Interlock release button' and ensure that pre rotator functions (movement of head cylinder) with brake engaged.			
	HTC Propeller				
170	Check – propeller blades for cracks, delamination or impact damage.	Minor damage may be repaired as defined in Cavalon AMM RSUK0288.			

171	Check – security of propeller protection tape (if fitted)				
172	Check – the torque between mounting bolts and gearbox flange (6-plcs). If torque stripes are missing, apply stripe to each of the six bolts holding the prop to the engine (flange side) after torque testing.	Remove spinner and torque-check the M8 bolts to 15Nm (6-plcs). If any visible movement remove each bolt in turn, visually inspect, re-Loctite 243 and replace, tightening to 15Nm. Torque-check the rim bolts to 12Nm. Tighten as required. Refit spinner using Loctite 243 on the spinner screws.			
173	F/C - tracking to manufacturers recommendations	(none required at the time of writing)			
174	Measure prop blade pitch angle Requirement; Nominal values 19.5deg (12ULS) or 20.5deg (914UL).	Recommend pitch to be within 0.5deg of each other	Blade 1……..….. Blade 2…… Blade 3…… Hub datum		
	Rotor				
	Early Cavalon gyroplanes have a variant of RotorSystemII in which the blades have reduced angle of incidence (RotorSystem II 8.4m RAO). Identification is by red end-caps and black clamping profile. **Later models use the 8.4m TOPP rotorsystem II with blue end caps.**	**These rotor blades are lifed at 2,500hrs.** **The rotor must not be replaced with a different type.** **Note blades, hub-bars and clamping profile are marked with serial numbers that must match on re-assembly.**			

180	The rotor should already be removed from the aircraft. Remove rotor blades from hub bar Clean carefully and degrease the inspection area, noting any evidence of fretting (a black dust or residue). Then check blade underside around outboard bolt hole area (to +/-60mm axially along the blade) for cracks with a x5 magnifier. Check blades for straightness axially in the area of the outboard bolt hole with a 1m straight edge.	These blades are life limited to 2,500hrs. This check is carried out every 500hrs to 1500hrs, then every 100hrs to 2,500hrs. No cracks permissible. No bend permissible. Carefully inspect the blade and hub bar bolt hole areas, refer to SIL-028. If any evidence of fretting is noted, contact RSUK for advice/action required. Replace bolts/nuts as required			
181	Inspect blades to manufacturers recommendations for any damage, splits etc.	Repair only as Cavalon AMM RSUK0288			
182	Inspect – condition of rotor blades, hub bars, condition and torque of hub-bar bolts and teeter block bolts.	Every 2yrs or 100hrs. Remove and replace the bolts sequentially. Full disassembly may adversely affect the rotor balance. Lubricate bolts with HHS2000 or equiv. Replace bolts/nuts as required Hub bar bolts (4-off) have M8 nyloc nuts (20+/-5Nm) Teeter-block bolts (4-off) have Binx nuts (20Nm)			
183	Check – rotor blade nut torque	The rotor blade bolts are of different lengths. Ensure correct location fitment. M8 Bolt/nyloc nut torque 20+/-5Nm. Refer to Section 9 “General Notes” of the Maintenance Manual for re-usage of nyloc nuts			
184	Refit rotor to aircraft ensuring that relative locations of shim washers correct (via dot marks). Regrease teeter bolt	Cavalon POH RSUK0287 Castrol LM grease or equivalent			

185	Confirm teeter bolt nut is hand tight (1-2Nm max) and split-pin fitted and correctly formed.		1st inspection Name: A3-7 authorisation no: Sig:…….. 2nd inspection Name: A3-7 authorisation no: Or, qualified pilot licence no: Sig:……..		
	Body and doors				
190	Inspect – doors for cracks, damage or distortion preventing easy opening and closing				
191	Inspect – door hinges for security, cracks or fractures				
192	Inspect – plexiglass surfaces (3-plcs) for cracks, cleanliness and obscurity. Determine if acceptable for flight				
193	F/C – opening and closing operation, and effectiveness of door locks	Must lock effectively in detent notch of door plate. See Cavalon AMM RSUK0288 for load values			
194	F/C – free and correct operation of sliding side windows (DV windows)				
195	F/C – security and free movement of rotary window vents				
	Pitot-static system				
196	Inspect – pitot tube general condition, secure installation, no obstructions				
197	Inspect – static ports open, placards installed, no obstructions				
	Other				
198	Inspect – Cabin ventilation – ensure port under body is free from obstruction				

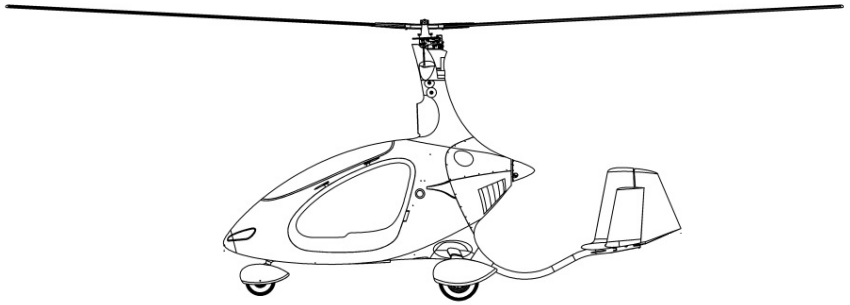
199	F/C – Cabin heat (if fitted) – ensure water-valve opens and closes on cockpit demand and that electric fan starts on selection of “hot”.				
200	Inspect – seat mountings secure and backrest adjustment correct operation				
201	Inspect – all seat belt attachment points for tightness and security				
202	Inspect – headset connector plate in good condition and headset hanger secure				
203	Inspect – radio antenna, check for damage and security.	Fitted internally in nose behind instrument panel (use mirror and torch) or externally under body			
204	Inspect – external transponder antenna, check for damage and security	Fitted to the rhs of the underbody.			
205	Inspect; bearing temp indicator and OAT indicators for clear display	Change each battery annually			
207	Overall check that all cockpit and panel fittings secure				
	Final ground run checks prior to release	Follow safe practice, aircraft tied-down and with qualified operator or pilot only.			
300	Carry-out a tool and loose article check in the area around the engine				
301	Re-install keel-tube cover				
302	Check all service pipes and cables around engine are secured				
303	Op/C – full functional check of engine start and run up to normal operating temperature				
304	Op/C- ensure engine achieves at least 5,400rpm on one fuel pump only, and with both pumps running.		RPM achieved:……		
305	OP/C - complete mag drop checks at 4,000rpm	See Cavalon POH RSUK0287 for limits	Mag drop L:…….. Mag drop R:……..		
306	Confirm-‘Gen’ light is on when engine not running, and off (or flickering gently) when running at above 2000rpm.				

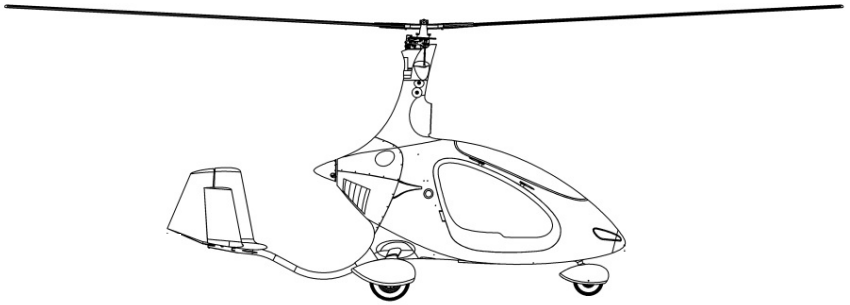
307	Confirm low fuel lamp is not lit (providing the fuel covers the sensor)	Low fuel indication at approx. 5 litres remaining			
308	Inspect – instruments for measurements consistent with ambient conditions				
309	Observing Rotax shut-down requirements stop engine. Inspect - Power plant and coolant system for leaks				
310	Reinstall the removeable firewall panel				
	Finalization work				
320	Carry-out a tool and loose article check				
321	Inside the a/c refit the stick gaitor(s). Verify full-and-free stick movement				
323	Re-install all inspection hatches (internal) and all service covers (external)				
324	Re-install all cowlings and mast cover				
325	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 BG06, the Type Approval Data Sheet (TADS) for the Cavalon. Note any non-compliances and actions taken.					

Tasks completed by (name): Signature: Initial:…… Date: (to compare to check sheet)	Engine hours logged: Airframe hours logged: Aircraft hour-meter reading:
The technical content of this document is approved under the authority of the UK CAA Design Organisation Approval Ref: ***DAI/9917/06***	

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. Name: Signature: Initial: Date (to compare to check sheet CAA Authorisation Ref No:	Comments:
Note to Engineer; remember to reference this worksheet and RSUK0288 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.	

Any cosmetic damage noted on first inspecting the aircraft should be marked on this graphic and brought to the owner's attention





Appendix

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.