

# Zeitlin COZY MKIV Annual Condition Inspection Checklist

ITEM	PROCEDURE / ACTION	OUTCOME
<b>Paperwork</b>		
	<i>Lo at paperwork</i>	
Paperwork Envelope	Check condition	
Paperwork	Check all in order	
Review W&B / Equipment list	Check and update if necessary	
Review Logbos	Check and update if necessary	
Search for AD's / Service letters	Comply if deemed necessary	

ITEM	PROCEDURE / ACTION	OUTCOME	
<b>Canard Area</b>		<b>L</b>	<b>R</b>
Static Ports	Check clear all three holes each side		
Elevator Torque Tube Attach Bolts	Check for rust/corrosion/torque – lubricate if necessary		
Elevator Inner Hinge	Check for corrosion – lubricate if necessary		
Elevator Middle Hinge	Check for corrosion – lubricate if necessary		
Elevator Outer Hinge	Check for corrosion – lubricate if necessary		
Elevator Hinge Pin Set Screw	Check for rust / corrosion / torque – lubricate if necessary		
Elevator(s) Top Surface	Check for delamination / paint condition		
Elevator(s) Bottom Surface	Check for delamination / paint condition		
Elevator(s) Weight & Balance	Check for appropriate weight and balance		
Elevator Clearance to Wing Tips	Check for 0.060" - 0.10" clearance		
Canard Top Surface	Check for delamination / paint condition		
Canard Bottom Surface	Check for delamination / paint condition		
Canard Cover Condition	Check for delamination / paint condition; check fasteners		
Canard Torque Tube Weather Seal	Check condition		
NACA air inlet	Check condition		
Elevator Torque Tube	Check condition		
Elevator Torque Tube Offset	Check condition / welds		
Elevator Trim Belcrank	Check condition / welds		
Elevator Inner Counterweight	Check condition		
Elevator Outer Counterweight	Check condition		
Elevator Outer Weight clearance	Check for 0.060" - 0.10" clearance		
Canard Lift Tabs / F22 Bushing	Check condition		
Alignment Pins / Socket	Check condition		
Lift Tab Bolt	Check condition		
Marker Beacon Antenna Cable	Check condition		

ITEM	PROCEDURE / ACTION	OUTCOME
<b>Nose Area</b>		
<i>Remove Front / Rear Nose Doors – ¼ Turn Fasteners</i>		
Front Nose Door	Check condition / ¼ turn fasteners	
Landing/Taxi Light Lenses	Check condition – clean / polish	
Landing/Taxi Lights	Check operation / condition / alignment / bolt torque	
Front Ballast Weights and mounting	Check condition	
Pitot Tube	Check condition	
Rear Nose Door	Check condition / ¼ turn fasteners	
Brake Reservoirs	Check condition / bolt torque / fluid level	
Brake Master Cylinders	Check condition / fittings	
Brake Lines	Check condition / fittings / routing	
Parking Brake Valve/Actuator	Check condition / fittings	
Battery Charge Port	Check condition / wire connections	
Piper Battery Jumper Connector	Check condition	
Jumper Solenoid and Switch	Check condition/operation	
Nose Battery Cables	Check condition	
Rear Ballast Weight and mounting	Check attachment points	
Nose Gear Cover	Check attachment / weather seal	
Nose Gear Mechanism	Check condition / operation – lubricate / grease if necessary	
Skyvector ADSB Receiver	Check condition / attachment / cable	
Transponder Antenna	Check attachment / cable	
APRS/Byonics GPS Antenna	Check attachment / cable	
Dynon EDC-10A Mag. Compass	Check condition	
Nose Area Wiring	Check condition / tie-wraps	
Rudder Pedals	Check condition – lubricate if necessary	
Rudder Pedal Brake Actuators	Check condition	
Rudder Cables	Check condition	
Nose Gear Strut	Check condition	
Nose Gear Upper Bearings - NG6A	Check condition	
Nose Gear Mechanism Spring	Check condition	
Upper Nose Gear Bolts/Bearings	Check condition / bolt torque – lubricate bearings if necessary	
Nose Gear Lower Casting	Check condition / bolt torque – grease wheel bearings if necessary	
Nose Gear Wheel/Tire	Check condition – inflate to 65 to 70 psi	
Nose Gear Rotation	Check condition / rotation force level – set to 4 lb.	
External Temperature Probe	Check condition	
Nose Gear Doors	Check condition and hinge/spring operation	
Nose Gear Wheel Well / Windows	Check condition	

ITEM	PROCEDURE / ACTION	OUTCOME	
<b>Top Fuselage / Front of Instrument Panel</b>	<i>Remove Fuselage Top and Instrument Panel Cover</i>	<b>L</b>	<b>R</b>
Elevator Pushrods	Check condition / Play		
All Side Wiring	Check condition / tie wraps		
Alarm Relay	Check condition		
Piezo Alarm Buzzer	Check condition		
Dimmer Circuitry	Check condition		
Manifold Pressure Sensor	Check condition		
Pitch Trim Motor / Extension Screw / Relay	Check condition / clean and lubricate per manual		
APRS box / wires	Check condition		
Manual Pitch Trim	Check condition		
Switch Wiring	Check condition		
Instrument Wiring	Check condition		
Top Fuselage Drain Line	Check condition		
Floor Water Drain Holes	Check condition / Clear through		
Heat Duct	Check condition		
Air Vents	Check condition / Clean		
Instrument Screws	Check condition / torque		
Compass	Check condition - swing if necessary		
VSI	Check condition / Adjust "0" position		
Hobbs Air Pressure Switch	Check condition		
Pitot / Static lines	Check condition / hose clamps		
Fuselage Top Hinges	Check condition / lubricate if necessary		
Fuselage Top Screws	Check condition		

ITEM	PROCEDURE / ACTION	OUTCOME	
<b>Fuselage Bottom</b>	<i>Remove Landing Gear Cover, Extend Landing Brake, Remove Wheel Pants</i>	<b>L</b>	<b>R</b>
Landing Gear Strut Attach Points	Check condition		
Gear Leg / Fuselage Fairing	Check condition		
Gear Leg Fairing	Check condition		
Wheel / Brake / Brake Pads	Check condition - replace pads as necessary		
Tire	Check condition - inflate to 55 - 60 psi		
Axle Bolt / Nut	Check condition		
Brake Line	Check condition		
Brake Line Bulkhead Fitting	Check condition		
Heat Shield / Insulation	Check condition		
Wheel Pant	Check condition		
Rear Seat NACA air intake - exterior	Check condition		
Landing Brake Surfaces	Check condition		
Landing Brake Mechanism	Check condition – lubricate inside and out if necessary		
NACA Scoop	Check condition		
Landing Gear Cover	Check condition		

ITEM	PROCEDURE / ACTION	OUTCOME	
<b>Front Cockpit</b>	<i>Remove Front Seats, Front Armrests, Front Center Console Cover, Fuel Valve Cover</i>	<b>L</b>	<b>R</b>
		Left / Right Front Seatbelts	Check condition
Left / Right Electric Seat Heaters	Check condition / operation		
Left / Right Control Sticks	Check condition – lubricate if necessary		
Left / Right PTT / Control Stick wiring	Check condition		
Front Left/Right Torque Tubes/ Bearings	Check condition		
Fuse / Ground Buses	Check condition		
Front Cockpit Wiring / Conduits	Check condition / tie wraps		
ELT	Check condition / battery date – test - New Batt 7/15		
Retractable Step	Check condition – lubricate if necessary		
Altitude Encoder	Check condition		
Roll Trim	Check condition – lubricate if necessary		
Throttle / Mixture Quadrant	Check condition – adjust/lubricate if necessary		
Hobbs Meter	Check condition / wiring		
Fire Extinguisher	Check condition / date (>500 g weight)		
O2 Tank Mounting / lines / QD's	Check condition		
O2 Tank	Check condition / date		
Canopy Frame / Transparency / Windows	Check condition		
Canopy Gas Spring / Lock	Check condition		
Canopy Latch/Safety Catch Mechanism	Check condition - adjust if necessary		
Canopy Seal	Check condition		
Canopy/Gear/Throttle Warning Circuit	Check operation/condition		
Canopy Hinges / Screws	Check condition		
Fuel Valve	Check condition - lubricate if necessary		
Heat Cable Actuator	Check condition - lubricate if necessary		

ITEM	PROCEDURE / ACTION	OUTCOME	
<b>Rear Cockpit</b>	<i>Remove Rear Seats, Landing Brake Cover, Rear Firewall Cover, Rear Armrests, Rear Center Console Covers</i>	<b>L</b>	<b>R</b>
		Rear Left / Right Torque Tubes / Bearings	Check condition
Rear Left / Right Seatbelts	Check condition		
Rear Cockpit Left / Right Air Vents	Check condition / Clean		
Left / Right Fuel Senders	Check condition - recalibrate if necessary		
Landing Brake Mechanism and Relay	Check condition - lubricate if necessary		
Fuel Lines	Check condition		
Ballast Storage Area	Check condition		
Spare Parts / Tools Compartment	Check condition		
Rear Cockpit Wiring / Conduits	Check condition		
Center Actuator Cables	Check condition		
Left / Right Landing Gear Attach Bolts	Check condition		
Cabin Heat Valve	Check condition		
Firewall Through Holes	Check condition		
Rear Ground Bus	Check condition		
Rear Essential Bus	Check condition		
Ammeter Shunt	Check condition		
Strobe Power Supply	Check condition		
Wiring / Antennae	Check condition		
Lightspeed EI Control Box	Check condition - timing if required		
Electric Fuel Pump tubing / wiring	Check condition		
Electric Fuel Pump Filter	Check condition - Clean if required		
Voltage Regulator	Check condition		
Battery	Check condition / clean contacts if required		
Master Solenoid	Check condition		
Brake Lines / Bulkhead Fittings	Check condition		

ITEM	PROCEDURE / ACTION	OUTCOME
<b>Left Strake / Wing / Winglet</b>	<i>Remove Bolt Covers, Wing Heat Shield, Aileron Hinge screws, Top Cowling</i>	
Tie Down Anchor	Check condition	
Wing Top Surface	Check condition – delamination tap	
Strake Top Surface	Check condition – delamination tap	
Gas Cap / Grounding Strap	Check condition	
Wing Bottom Surface	Check condition – delamination tap	
Strake Bottom Surface	Check condition – delamination tap	
LE Gas Drain	Check condition – Fuel Flow	
Aileron Top Surface	Check condition – delamination tap	
Aileron Bottom Surface	Check condition – delamination tap	
Aileron Cove Clearance	Check for 0.060" - 0.10" clearance	
Aileron Tip Clearance	Check for 0.060" - 0.10" clearance	
Aileron Root Clearance	Check for 0.060" - 0.10" clearance	
Aileron Hinges	Check condition	
Aileron Weight and Balance	Check aileron weight and balance	
Three Vortilons	Check condition	
Wing Bolts	Check condition – lubricate if necessary	
Winglet Outer Surface	Check condition – delamination tap	
Winglet Inner Surface	Check condition – delamination tap	
Rudder Outer Surface	Check condition – delamination tap	
Rudder Inner Surface	Check condition – delamination tap	
Internal Rudder Belhorn	Check condition	
Rudder Spring	Check condition – lubricate if necessary	
Rudder Hinges	Check condition	
Aileron Pushrods	Check condition	
Aileron Belcrank	Check condition – lubricate if necessary	
Aileron Torque Tube / U-joint	Check condition – lubricate if necessary	
Aileron Bushing	Check condition	
Nav./Strobe Light	Check condition	
Rudder Cable Entrance	Check condition	

ITEM	PROCEDURE / ACTION	OUTCOME
<b>Right Strake / Wing / Winglet</b>	<i>Remove Bolt Covers, Wing Heat Shield, Aileron Hinge screws, Top Cowling</i>	
Tie Down Anchor	Check condition	
Wing Top Surface	Check condition – delamination tap	
Strake Top Surface	Check condition – delamination tap	
Gas Cap / Grounding Strap	Check condition	
Wing Bottom Surface	Check condition – delamination tap	
Strake Bottom Surface	Check condition – delamination tap	
LE Gas Drain	Check condition – Fuel Flow	
Aileron Top Surface	Check condition – delamination tap	
Aileron Bottom Surface	Check condition – delamination tap	
Aileron Cove Clearance	Check for 0.060" - 0.10" clearance	
Aileron Tip Clearance	Check for 0.060" - 0.10" clearance	
Aileron Root Clearance	Check for 0.060" - 0.10" clearance	
Aileron Hinges	Check condition	
Aileron Weight and Balance	Check aileron weight and balance	
Three Vortilons	Check condition	
Wing Bolts	Check condition – lubricate if necessary	
Winglet Outer Surface	Check condition – delamination tap	
Winglet Inner Surface	Check condition – delamination tap	
Rudder Outer Surface	Check condition – delamination tap	
Rudder Inner Surface	Check condition – delamination tap	
Internal Rudder Belhorn	Check condition	
Rudder Spring	Check condition – lubricate if necessary	
Rudder Hinges	Check condition	
Aileron Pushrods	Check condition	
Aileron Belcrank	Check condition – lubricate if necessary	
Aileron Torque Tube / U-joint	Check condition – lubricate if necessary	
Aileron Bushing	Check condition	
Nav./Strobe Light	Check condition	
Rudder Cable Entrance	Check condition	

ITEM	PROCEDURE / ACTION	OUTCOME
<b>Engine Compartment</b>	<i>Remove Upper and Lower Cowling, Spinner</i>	
Engine Mount	Check condition	
Engine Mount Bolts	Check torque	
Dynafoal Mounts / Bolts	Check condition - tighten if necessary	
Firewall Through Holes	Check condition	
Engine Case Bolts	Check torque	
AP Roll Servo	Check condition / wiring	
Alternator Mounting	Check condition	
Alternator / Starter Wires	Check condition	
Pmag / Wiring	Check condition - timing - inspect per installation manual - Check radial play	
Lightspeed EI Coils	Check condition	
Ignition Wires	Check condition	
CHT / EGT Probes / Wires	Check condition	
Starter Solenoid	Check condition	
Fuel Lines	Check condition	
Fuel Flow Sender	Check condition / wires / lines	
Fuel Pressure Sender	Check condition / wires / lines	
Fuel Pump - Engine	Check condition	
Fuel Injector Servo Inlet Screen	Check condition – clean if required	
Fuel Flow Test	Check flow rate at Servo Inlet > 40 gph w/ electric pump	
Spider Fuel Lines / Fittings / Manifold	Check condition – check fittings	
Fuel Injectors	Check condition – braze joints, clamps	
Airflow Performance Servo	Check condition – check fittings	
Oil Cooler	Check condition	
Oil Filter Louvers / Cable	Check condition	
Oil Filter	Check condition	
Oil Pump Intake Screen	Check condition - clean if necessary	
Oil Pressure Sender / Wires	Check condition	
Oil Temperature Sender / Wires	Check condition	
Oil Quick Drain	Check for leaks	
Oil Level	Check level	
Valve Cover Gaskets	Check condition	
Valve Cover Gasket Screws	Check torque	
Crankcase Vent Line	Check condition	
Oil Separator / Collector	Check condition / drain oil if necessary	
Exhaust System	Check condition	
Heat Muff / SCAT Tubing	Check condition	
Throttle Actuator Cable	Check condition – lubricate if necessary	
Mixture Actuator Cable	Check condition – lubricate if necessary	
Manifold Pressure Sensor Tubing	Check condition	
Air Filter	Check condition	



ITEM	PROCEDURE / ACTION	OUTCOME	
<b>Engine Compartment, Continued</b>			
Aluminum Baffling	Check condition - Patch as necessary		
Silicone Baffling	Check condition - Patch as necessary		
Spark Plugs	Remove - Check condition - clean and gap to 0.035" as required or replace		
Engine Cylinder Compression	Check	<b>Cylinder Compression</b>	
		1	XX/80
		2	XX/80
		3	XX/80
		4	XX/80
Alternator / Belt	Check condition / tension		
Prop Extension Bolts	Check condition		
Prop Bolts	Check condition - torque - re-safety wire if necessary		
Prop Bolt Belleville Washers	Check condition / measure spacing if required	<b>Bolt Turns Start Final</b>	
		1	
		2	
		3	
		4	
		5	
		6	
Propeller	Check condition – fill nicks w/JB Weld		
Propeller Tracking	Check track within ± 1/16"		
Propeller Balance	Dynamic Balance if necessary		
Spinner (if installed)	Check condition – alignment marks		
Top Cowl	Check condition		
Bottom Cowl	Check condition		
		<b>L</b>	<b>R</b>
Aileron Torque Tubes / Bushings	Check condition – lubricate if necessary		
Aileron Pushrods / Quick Disconnects	Check condition		
Rudder Cables	Check condition		
Rudder In-Line Compression Springs	Check condition		
Rudder Pulleys	Check condition – lubricate if necessary		