**Q Annual Inspection / Condition Inspection**

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| **Reg#** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  | **Model** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **S.N.** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **Builder** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **Tach hrs.** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **Date** | Start \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Finished \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **Performed by** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **Certificate** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| **ENGINE** | Checked | Completed |
| Warm engine to operating temperature. (Go fly) |   |   |
| Remove cowling and inspect for chafing and stains. |   |   |
| Clean & inspect cowling and fasteners |   |   |
| Check air intake screen.  |   |   |
| Check for evidence of oil leaks and fuel leaks.  |   |   |
| Drain oil. (Take oil sample).  |   |   |
| Compression test: #1 cylinder  |   |   |
|             #2 cylinder  |   |   |
|              #3 cylinder  |   |   |
|               #4 cylinder  |   |   |
| Clean, inspect, and re-gap spark plugs.  |   |   |
| Check ignition timing. (For reference).  |   |   |
| Check plug wires condition.  |   |   |
| Rotate and reinstall top spark plugs.  |   |   |
| Pull engine forward to access rear of engine.  |   |   |
| Check mag points and lube cam.  |   |   |
| Check distributor, points, and rotor & lubricate.  |   |   |
| Adjust timing if needed.  |   |   |
| Check magneto cooling hoses.  |   |   |
| Check oil screen, replace gasket, and re-safety.  |   |   |
| Check electrical connections; starter, gen., voltage reg., etc.  |   |   |
| Remove gen. & starter covers, check brushes and commutator.  |   |   |
| Check all nuts & bolts for torque on accessory case.  |   |   |
| Check engine mounts, rubber, and bolts.  |   |   |
| Reinstall engine, hook everything up.  |   |   |
| Install lower plugs.  |   |   |
| Replace oil. (Install new drain plug gasket & safety).  |   |   |
| Check fuel strainer & safety.  |   |   |
| Drain Carburetor bowl & clean carb. inlet screen.  |   |   |
| Remove heat muffs.  |   |   |
| Check exhaust system for cracks and leaks.  |   |   |
| Reinstall muffs.  |   |   |
| Check all hose connections and clamps.  |   |   |
| Check all fuel & oil hoses for leaks, security, chafing.  |   |   |
| Check rocker box covers, valve springs, and rocker arms.  |   |   |
| Spot check cylinder base nuts.  |   |   |
| Check push rod housings, seals & clamps.  |   |   |
| Check intake manifolds for leaks. (look for fuel stains).  |   |   |
| Check inter-cylinder & head baffles.  |   |   |
| Check carb heat valve.  |   |   |
| Remove & inspect spinner for wear and/or cracks. Inspect propeller.  |   |   |
| Re-torque prop bolts, check tracking, & re-safety.  |   |   |
| Wash engine with approved solvent.  |   |   |
| Inspect controls for full range of movement.  |   |   |
| Lube engine controls.  |   |   |
| Run up & check for leaks.  |   |   |
| Replace cowling & run visual check.  |   |   |
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| **FUSELAGE** | Checked | Completed |
| Check exterior for cracks or delaminations. |   |   |
| Remove upholstery.  |   |   |
| Thoroughly clean interior. Note stains or leaks.  |   |   |
| Check internal integrity of fuselage wall and bulkheads. |   |   |
| Check control cables, tubes, brackets, etc. aft section.  |   |   |
| Check aileron bellcranks & lube.  |   |   |
| Check aileron mass balance weights.  |   |   |
| Check tail cone attach brackets and bolts.  |   |   |
| Check reflexor and lube.  |   |   |
| Check battery cables and solenoid for corrosion and security.  |   |   |
| Service battery as required.  |   |   |
| Check battery box for security and venting.  |   |   |
| Check for fuel leaks inside cabin. Clean/replace filter.  |   |   |
| Drain fuel sumps.  |   |   |
| Check fuel primer.  |   |   |
| Check fuel gauges for condition and operation.  |   |   |
| Check speed brake pivots, hinge, and latching.  |   |   |
| Check control stick for movement, wear, and cracks.  |   |   |
| Check canopy latch system.  |   |   |
| Check safety belt harness for security and condition.  |   |   |
| Check wiring, lines, and controls behind instrument panel.  |   |   |
| Check elevator trim system.  |   |   |
| Check instruments and vacuum system for condition and leaks.  |   |   |
| Check electrical system.  |   |   |
| Check interior lighting.  |   |   |
| Check instrument panel for general condition and security.  |   |   |
| Check instruments for proper marking and illumination.  |   |   |
| Check fuel filler cap and door.  |   |   |
| Check fuel tank decals for condition, octane, and capacity.  |   |   |
| Check Aux fuel tank, lines, pump & filler cap. |   |   |
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| **WINGS** | Checked | Completed |
| Check general condition, cracks, or delaminations.  |   |   |
| Check controls and bellcranks, nuts and bolts.  |   |   |
| Check elevators pivots for wear. Lube.  |   |   |
| Check elevators for security.  |   |   |
| Check aileron pivots for wear. Lube. |   |   |
| Check ailerons for security.  |   |   |
| Check electrical wiring.  |   |   |
| Check position lights.  |   |   |
| Check anti-collision lights.  |   |   |
| Check landing light.  |   |   |
| Check condition of main wheels and tires.  |   |   |
| Check brake pucks.  |   |   |
| Check brake rotors and calipers.  |   |   |
| Check axle and axle hard points.  |   |   |
| Check wheel bearings.  |   |   |
| Fill master cylinder.  |   |   |
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| **TAIL ASSEMBLY** | Checked | Completed |
| Check tail cone for general condition, cracks, delams. |   |   |
| Check tail wheel spring.  |   |   |
| Check tail wheel, bearings, swivel, and tail wheel bracket.  |   |   |
| Check tail wheel bolts and lube.  |   |   |
| Check rudder pivot points for wear and lube.  |   |   |
| Check rudder horn.  |   |   |
| Check all rudder cables for wear and adjustment.  |   |   |
| Check rudder cable pulleys for wear, movement, alignment.  |   |   |
| Check rudder pedals for security.  |   |   |
| Check position light. |   |   |
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| **MISCELLANEOUS** | Checked | Completed |
| Data Plate.  |   |   |
| Airworthiness Certificate.  |   |   |
| Operating Limitations.  |   |   |
| Weight and Balance data.  |   |   |
| State registration.  |   |   |
| Passenger warning and Experimental placard.  |   |   |
| Passenger Sic Sacs.  |   |   |
| NASA incident reporting form.  |   |   |
| Transponder due date.  |   |   |
| Altimeter due date (If IFR).  |   |   |
| Static system due date (If IFR).  |   |   |
| E.L.T. battery replacement date.  |   |   |
| E.L.T. check (Within 5 minutes past the hour).  |   |   |
| Fire extinguisher.  |   |   |
| Functional ground check of radio.  |   |   |
| Fill out logbooks. |   |   |
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