

# 100-Hour/Annual Inspection Checklist (GA)

Part 23, CAR 3 Aircraft

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## Reference Data:

FAA [Orders 2150.3A](#) Compliance and Enforcement Program, 8130.2, CAR-3, CFR 21 Certification, CFR 23 Airworthiness Standards, CFR 43 Maintenance, CFR 45 Markings, CFR 47 Registered properly, CFR 91 Pilot Responsibility, CFR 36 Noise, CFR 33 engines, CFR 39 AD's, CFR 145 Repair Stations and AC 43.13-1B, 2A Major Repair and Alterations, Manufacturer Maintenance Manuals.

## INTERPRETATION OF THE TERM "AIRWORTHY"

The aircraft must conform to its type certificate.

When aircraft configuration and the components installed are consistent with drawings, specifications, and other data that are part of the type certificate (T/C), and include any supplemental T/C and field approval alterations incorporated into the aircraft.

The aircraft must be in condition for safe operation.

Aircraft relative to wear and deterioration

i.e., corrosion, fluid leaks, tire wear, window delimitation/crazing.

**NOTE:** *If one or both of these conditions are not met, the aircraft would be considered unairworthy.* Order 8130.2F Para 9

**NOTE:** This is only a guide and should not be considered FAA approved data for 100 hour or annual inspection checklist. Consult, CFR 43 subpart D, for scope and detail of items to be included for 100 hour or annual inspections. **This checklist is not exhaustive and does not supersede Manufacture's publications and is up-dated periodically!**

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**Aircraft Data**

N \_\_\_\_\_

Date: \_\_\_\_\_

|                     | Manufacturer | Model | Serial Number | Year | Time | SMOH |
|---------------------|--------------|-------|---------------|------|------|------|
| <b>Aircraft</b>     |              |       |               |      |      |      |
| <b>Engine #1</b>    |              |       |               |      |      |      |
| <b>Engine #2</b>    |              |       |               |      |      |      |
| <b>Propeller #1</b> |              |       |               |      |      |      |
| <b>Blades</b>       |              |       |               |      |      |      |
| <b>Propeller #2</b> |              |       |               |      |      |      |
| <b>Blades</b>       |              |       |               |      |      |      |

**Time at last annual:** \_\_\_\_\_ **Time since last annual/overhaul:** \_\_\_\_\_

|                           |     |      |      |
|---------------------------|-----|------|------|
| Airframe Type Certificate | No. | Rev. | Sat. |
| ASTM                      | No. | Rev. | Sat. |
| Certification Basis:      | CAR | FAR  |      |

**Engine Parts**

| Category            | Manufacturer | Part Number | Serial Number |
|---------------------|--------------|-------------|---------------|
| Alternator 1        |              |             |               |
| Alternator 2        |              |             |               |
| Air Filter          |              |             |               |
| Carburetors         |              |             |               |
| Servo Fuel Injector |              |             |               |
| Batteries           |              |             |               |
| Brake Assemblies    |              |             |               |
| Fuel Pump           |              |             |               |
| Generator           |              |             |               |
| Magneto Left        |              |             |               |
| Magneto Right       |              |             |               |
| Oil Cooler          |              |             |               |
| Oil Filter          |              |             |               |
| Pre-Oiler           |              |             |               |
| Oil Separator       |              |             |               |
| Spark Plugs         |              |             |               |
| Starter             |              |             |               |
| Turbocharger        |              |             |               |
| Vacuum Pump 1       |              |             |               |
| Vacuum Pump 2       |              |             |               |
|                     |              |             |               |
|                     |              |             |               |
|                     |              |             |               |
|                     |              |             |               |
|                     |              |             |               |
|                     |              |             |               |

**Electronics and Instruments**

| Category                       | Manufacturer | Part Number | Serial Number |
|--------------------------------|--------------|-------------|---------------|
| Auto-pilot                     |              |             |               |
| Autopilot Servo                |              |             |               |
| ELT–Battery Due:               |              |             |               |
| Engine Monitor                 |              |             |               |
| Fuel Totalizer                 |              |             |               |
|                                |              |             |               |
| Airspeed Indicator             |              |             |               |
| Altimeter                      |              |             |               |
| Attitude Indicator             |              |             |               |
| Horizontal Sit Ind-HSI         |              |             |               |
| Heading Indicator              |              |             |               |
| Radio Magnetic Indicator       |              |             |               |
| Turn Coordinator/Turn and Bank |              |             |               |
| Vertical Speed Indicator VSI   |              |             |               |
|                                |              |             |               |
| Radio 1                        |              |             |               |
| Radio 2                        |              |             |               |
| OBS 1                          |              |             |               |
| OBS 2                          |              |             |               |
| Intercom/System                |              |             |               |
| Audio Panel                    |              |             |               |
| Multi-Function Display         |              |             |               |
| DME-Dist Measuring             |              |             |               |
| LORAN                          |              |             |               |
| Transponder                    |              |             |               |

**A comprehensive Equipment List is at the end of this document.**

| N/A | Not Sat. | Sat. | STC/TSO/PMAs and Form 337 additions |  |
|-----|----------|------|-------------------------------------|--|
|     |          |      |                                     |  |
|     |          |      |                                     |  |
|     |          |      |                                     |  |
|     |          |      |                                     |  |
|     |          |      |                                     |  |
|     |          |      |                                     |  |
|     |          |      |                                     |  |
|     |          |      |                                     |  |
|     |          |      |                                     |  |
|     |          |      |                                     |  |

| N/A | Not Sat. | Sat. | <b>Airman Attitude</b>                          |                        |
|-----|----------|------|---|------------------------|
|     |          |      | Has a constructive attitude toward compliance   | Order 2150.3A par. 205 |
|     |          |      | Verify A&P/IA certificate number and picture ID | CFR 65.91              |
|     |          |      | Verify Pilots certificate number and picture ID | CFR 61.3               |

| N/A | Not Sat. | Sat. | <b>Aircraft Data</b>   |                           |
|-----|----------|------|--|---------------------------|
|     |          |      | FAA-approved maintenance manuals available   | CFR 43.13.                |
|     |          |      | Alterations IAW approved STC/TSO/PMA Field approval or other FAA data, (337's)     | CFR 21.97/101/113         |
|     |          |      | Instructions for Continued Airworthiness   | CFR 21.31, 21.50, 23.1529 |
|     |          |      | Type Certificate Data Sheet (TCDS)   | CAR 3.15, CFR 21.41       |
|     |          |      | Aircraft Flight Manual/Pilot Operating Hand book AFM/POH Date _____ Rev. No. _____ | CAR 3.72, CFR 21.5        |
|     |          |      | Data plate aircraft  | CFR 45.13                 |
|     |          |      | Data plate aircraft manufactured before March 7, 1988 Make/model, S/N              | CFR 45.11(d)              |
|     |          |      | Data plate engine on engine make and model/serial number                           | CFR45.11,21.182           |
|     |          |      | Data plates critical components  | CAR 3.18, CFR 45.15       |
|     |          |      | Data plates Life Limited parts   | CFR 45.16                 |

| N/A | Not Sat. | Sat. | <b>Aircraft Records</b>   |                             |
|-----|----------|------|---|-----------------------------|
|     |          |      | Registration current and in aircraft  | CAR 3.792, CFR 91.9         |
|     |          |      | Airworthiness Certificate in aircraft. Dated and signed   | CFR 91.203(a), 21.175       |
|     |          |      | Reduced Vertical Separation Minimums (RVSM) with Letter of Authorization (LOA)  | CFR 91.706                  |
|     |          |      | <b>Previous Annual inspection completed:</b>  | CFR 43.11, 91.417, 65.91    |
|     |          |      | Date _____ Total time _____<br>Description of work accomplished y/n<br>IA Name _____ Signature y/n<br>Certification No. _____ |                             |
|     |          |      | 145 Repair station sign off date<br>Repair Station number _____   |                             |
|     |          |      | <b>Progressive Inspection</b>   | CFR 91.409(d), 91.409(d)(1) |
|     |          |      | Last Progressive Inspection phase sign off date<br>Phase inspection dated and signed by A&P/IA                                |                             |
|     |          |      | 145 Repair station number _____   | CFR 145.5/107/201/204       |
|     |          |      | <b>100-hour inspection.</b>   | CFR 91.405(b)               |
|     |          |      | Date _____ Total time _____   |                             |
|     |          |      | 145 Repair station number _____   | CFR 145.5/107/201/204       |
|     |          |      | A&P sign off date _____<br>Certification No, _____  | CFR 43.15, 65.85, 91.409    |
|     |          |      | A&P/IA Signature _____  | CFR 43.11, 91.417           |
|     |          |      | Equipment list current and in aircraft  | CAR 3.73, CFR 23.29, 91.9   |
|     |          |      | Equipment list up-dated to match conformity of aircraft   | CAR 3.777, CFR 91.9         |
|     |          |      | Status of Life Limited parts Effective April 15, 2002   | CFR 43.10                   |
|     |          |      | Manufactured after 3-1-1979:  |                             |
|     |          |      | Current approved flight manual in aircraft  | CFR 21.5/23.1581, 91.9      |
|     |          |      | Manufactured before 3-1-1979:   | CAR 3.778                   |

| N/A | Not Sat. | Sat. | <b>Aircraft Records</b>  |   |
|-----|----------|------|--|---|
|     |          |      | Current flight manual POH in aircraft  |   |
|     |          |      | Revision number/date _____<br>Limitations and placards   | CFR 21.5, 21.1559, 23.1581, 91.9        |
|     |          |      | Current weight, balance report, Dated and signed   | CAR 3.71,<br>CFR 23.1519, 23.1581, 91.9 |
|     |          |      | Identification data plate secured to A/C fuselage exterior                                     | CFR 45.11                               |
|     |          |      | Minimum Equipment List (MEL) if applicable:  | CFR 91.213                              |
|     |          |      | a. MEL: Issued by N-number and serial number to the aircraft operator                          |   |
|     |          |      | b. MEL: A Letter of Authorization (LOA) from a district office;                                |   |
|     |          |      | c. Check deferred items for placards and dates   |   |
|     |          |      | Maintenance Records for each Engine, Propeller, Airframe and Appliances in accordance with CFR | CFR 91.417                              |
|     |          |      | Deferred items under Part 91.213 for Day VFR   | CFR 91.213                              |
|     |          |      | a. Is the item placarded   |   |
|     |          |      | b. Is there a maintenance record entry   |   |
|     |          |      | c. Is the item disabled or removed   |   |

| N/A | Not Sat. | Sat. | <b>Aircraft Records 24 Month and 12 Month Tests</b>               |                                    |
|-----|----------|------|---|------------------------------------|
|     |          |      | ELT TSO-C91a /TS0-C126 every 12 months<br>Date:                   | CFR 91.207                         |
|     |          |      | ATC transponder 24 calendar months check.<br>Date:                | CAR 23.1301, CFR 91.413,           |
|     |          |      | Altimeter system and altitude reporting test: 24 months.<br>Date: | CFR 91.411, 43 App E               |
|     |          |      | Pitot static test: 24 months<br>Date:                             | CAR 23.1301, CFR 91.411, 43 App. F |

| N/A | Not Sat. | Sat. | <b>Aircraft Records ADs</b>  |                |
|-----|----------|------|--|----------------|
|     |          |      | All AD's, recorded in maintenance records and check recurring AD's | CFR 39, 91.417 |
|     |          |      | Airframe   |                |
|     |          |      | Engine   |                |
|     |          |      | Propeller  |                |
|     |          |      | Appliances Check for a list of items                               |                |
|     |          |      |  |                |
|     |          |      |  |                |
|     |          |      |  |                |

| N/A | Not Sat. | Sat. | <b>Cockpit Inspection</b>   |  |
|-----|----------|------|---|--|
|     |          |      | Placards read correctly Instrument, placards are correctly located per POH/AFM & TCDS | CFR 23.1541-1567/ CAR 3.755, CFR 91.31 |
|     |          |      | <b>INOP placards</b>  | CFR 91.213                             |
|     |          |      | a. INOP instruments disabled or removed by an A&P                                     | CFR 91.213                             |
|     |          |      | b. Equipment list up-dated  | CFR 91.213                             |
|     |          |      | c. Maintenance record entry   | CFR 91.213                             |
|     |          |      | d. Weight and balance record updated  | CFR 91.9                               |
|     |          |      | e. Minimum Equipment List (MEL) for aircraft  | CFR 91.213(a)(1)                       |

| N/A | Not Sat. | Sat. | Cockpit Inspection   |   |
|-----|----------|------|--|---|
|     |          |      | Vacuum indicating system, Life limited pump  | CFR 23.1301   |
|     |          |      | Compass card present and readable  | CAR 3.385, CFR 23.1547, 25.1547   |
|     |          |      | Additional instruments not on equipment list or Form 337   | CAR 3.661, CFR 21.113   |
|     |          |      | Type of clock installed original analog or digital working   | AC 20-94  |
|     |          |      | Nav Radio 1: P/N _____, 2: P/N _____<br>matches equipment list   |   |
|     |          |      | Conforms to Type Certificate (TC) per POH/AFM<br>see items list in previous lines.   |   |
|     |          |      | Cockpit fuel smell   | CAR 3.440, CFR 23.863   |
|     |          |      | Data plate information matches registration  | CFR 45.11/13, 47.3  |
|     |          |      | Intercom jack, how many any extra _____ and required Form 337  |   |
|     |          |      | Fire extinguisher gage Green Red   | CFR 23.1199   |
|     |          |      | Fire Extinguishing Agent commuter category installed   | CFR 23.1197   |
|     |          |      | Fire extinguisher easy access to pilot   | CFR 23.851  |
|     |          |      | Oxygen equipment and supply lines condition  | CFR 23.1441-1453  |
|     |          |      | Oxygen bottle if required Green Red  | CFR 23.1441   |
|     |          |      | Hydro AA 5 years HT 3 year retire at 24 years  | AC 43.13-1b Para 9-51   |
|     |          |      | Instrument filter covers installed   |   |
|     |          |      | Yoke chain safety wired, loose or corrosion present  | CFR 43.13   |
|     |          |      | Cockpit control knob shape correct type  | CAR 3.384, CFR 23.781   |
|     |          |      | Flap, gear, knobs installed  | CAR 3.384, CFR 23.781   |
|     |          |      | Electrical wiring more than ½ inch slack   | AC 43.13-1B Para 11-118   |
|     |          |      | Electrical wiring clamps/markings as required  | AC 43.13-1B sec. 11   |
|     |          |      | Tie-wraps items of mass in the cabin   | CFR 23.561  |
|     |          |      | Loose wires under dash not clamped   | CFR 23.1351   |
|     |          |      | Fuel selector moves to all positions and placarded   | CAR 3.364, CFR 23.951   |
|     |          |      | Brake master cylinder leaking R/H L/H  | CRF 43.13   |
|     |          |      | Thoroughly clean the aircraft and aircraft engine  | CFR 43 App D  |
|     |          |      | Cargo tie downs or nets if installed   | CFR 91.525  |
|     |          |      | General, uncleanness and loose equipment that might foul the controls,<br>apparent and obvious defects and insecurity of attachment. | CRF 43 App D  |
|     |          |      | Stall warning system horn works  | CAR 3.120, CFR 23.1323  |
|     |          |      | Windshield STC for one piece   | CFR 43 App A  |
|     |          |      | Windows tinted   | TCDS/Equipment list   |
|     |          |      | Sun visor installation or STC with form 337  | CFR 43.13   |
|     |          |      | Windshield and windows conditions  | CAR 3.382, CFR 23.775   |
|     |          |      | Windscreen clear scratches cracks crazing  | Reference, CFR 23.775<br>AC 43.13-1b and MIL-P-5425                             |
|     |          |      | Windows stopped drilled, cracked, or crazed  | CAR 3.382, CFR 23.775,<br>AC 43.13-1B Chap 3 Para 318 (a)(2),<br>and MIL-P-5425 |

| N/A | Not Sat. | Sat. | <b>Aircraft Instruments—Minimum Required Under Old Certification Rules</b><br>CAR 3.655, CFR 23.1303 |
|-----|----------|------|--|
|     |          |      | Air speed indicator  |
|     |          |      | Altimeter  |
|     |          |      | Direction indicator  |

| N/A | Not Sat. | Sat. | <b>Aircraft Instruments—Minimum Required for VFR Day</b><br>CAR 3.655, CFR 91.205(b) and CAR 3.672 (MP Gauge) |
|-----|----------|------|---|
|     |          |      | Air speed indicator   |
|     |          |      | Altimeter   |
|     |          |      | Magnetic direction indicator  |
|     |          |      | Tachometer for each engine  |
|     |          |      | Oil pressure gauge for each engine using pressure system  |
|     |          |      | Manifold pressure gauge for each altitude engine  |
|     |          |      | Fuel gauge indicating the quantity of fuel in each tank   |
|     |          |      | Landing gear position indicator, if retractable   |

| N/A | Not Sat. | Sat. | <b>Aircraft Instruments—Minimum Required for IFR Rules</b><br>CFR 91.205(c) and CAR 3.668 (Gyroscopic Rate of Turn Indicator) |
|-----|----------|------|---|
|     |          |      | Two-way radio communications and navigation equipment   |
|     |          |      | Gyroscopic rate-of-turn indicator   |
|     |          |      | Slip-skid indicator   |
|     |          |      | Sensitive altimeter adjustable for barometric pressure  |
|     |          |      | Clock displaying hours, minutes, and seconds with sweeping second hand pointer or digital presentation                        |
|     |          |      | Generator or alternator of adequate capacity  |
|     |          |      | Gyroscopic pitch and bank indicator (artificial horizon)  |
|     |          |      | Gyroscopic direction indicator (directional gyro)   |

| N/A | Not Sat. | Sat. | <b>Instrument Arrangement</b><br>CAR 3.661, CFR 23.1321, CFR 23.1547 (Magnetic Direction Indicator)    |
|-----|----------|------|--|
|     |          |      | Attitude indicator on panel top center position  |
|     |          |      | Airspeed indicator adjacent to and directly to left of the instrument in the top center position.      |
|     |          |      | Altitude indicator adjacent to and directly to right of the instrument in the top center position.     |
|     |          |      | Magnetic direction indicator placard must state whether the calibrated with radio receivers on or off. |
|     |          |      | Magnetic direction indicator more than 10 degrees off  |

| N/A | Not Sat. | Sat. | <b>Instrument Markings</b><br>CAR 3.755, CFR 23.1543           |
|-----|----------|------|--|
|     |          |      | Marking on cover glass must be in alignment with face          |
|     |          |      | Each arc and line must be clearly visible to pilot             |
|     |          |      | All related instruments must be calibrated in compatible units |

| N/A | Not Sat. | Sat. | Electrical System  |  |
|-----|----------|------|--|--|
|     |          |      | CAR 3.694, CFR 23.1367   |  |
|     |          |      | <b>Switches</b>  |  |
|     |          |      | a. Able to carry rated current   | CAR 3.682, CFR 23.1367                         |
|     |          |      | b. Enough distance or insulating material between current carrying parts and the housing so that vibration will not cause shorting | CAR 3.681, CFR 23.1367                         |
|     |          |      | c. Labeled as to operation and circuit controlled  | CFR 23.1367                                    |
|     |          |      | <b>Circuit Breakers/Fuses</b>  |  |
|     |          |      | a. Circuit protection  | CAR 3.690, CFR 23.1357                         |
|     |          |      | b. Each resettable circuit trip free cannot be overridden  | CFR 23.1357                                    |
|     |          |      | c. Fuses readily available and spare   | CAR 3.692, CFR 23.1357                         |
|     |          |      | d. Breakers labeled and rating   | CAR 3.691, CFR 23.1357                         |
|     |          |      | <b>Master Switch</b>   |  |
|     |          |      | a. Wired to disconnect each electrical power source from the distribution systems  | CAR 3.688, CFR 23.1361                         |
|     |          |      | b. Switch is easily discernible and accessible to crew   | CAR 3.695, CFR 23.1361                         |
|     |          |      | <b>Wiring inspection</b>   | CAR 3.681, CFR 23.1351, AC43.13 Chap 11        |
|     |          |      | a. Chafed or frayed wires  |  |
|     |          |      | b. Insulation penetration  |  |
|     |          |      | c. Outer insulation cracking   |  |
|     |          |      | d. Damage or exposed wires   |  |
|     |          |      | e. Evidence of over heating  |  |
|     |          |      | f. Evidence of arcing  |  |
|     |          |      | g. Evidence of chemical contamination  |  |
|     |          |      | <b>Wire Marking</b>  | CFR 23.1351,,AC43.13 Chap 11                   |
|     |          |      | a. Gage, circuit, and gage size  |  |
|     |          |      | b. Marked 15 inched maximum intervals  |  |
|     |          |      | <b>Grounding Points</b>  | CFR 23.1351, 43.13 Chap 11, AC 25-16, 25-10    |
|     |          |      | a. Tightness of nuts (torque)  |  |
|     |          |      | b. Cleanliness of attach points  |  |
|     |          |      | c. Corrosion   |  |
|     |          |      | <b>Sleeving and Conduits</b>   | CFR 23.1351, AC 43.13 Chap 11, AC 25-16, 25-10 |
|     |          |      | a. Damages outer surfaces (kinks, holes, flats spots, etc.)  |  |
|     |          |      | b. Wear  |  |
|     |          |      | c. Adequate drain holes  |  |
|     |          |      | <b>Clamping Points</b>   | CFR 23.1351, AC 43.13 Chap 11, AC 25-16, 25-10 |
|     |          |      | a. Improper installation   |  |
|     |          |      | b. Clamp/wire damage   |  |
|     |          |      | c. Clamp cushion migration   |  |
|     |          |      | d. Loose wires   |  |

| N/A | Not Sat. | Sat. | Equipment Furnishings                              |                           |
|-----|----------|------|--|---------------------------|
|     |          |      | Equipment installed functions properly             | CAR 3.622, CFR 23.1301(d) |
|     |          |      | Flight manual correct for aircraft                 | TCDS                      |
|     |          |      | Trim tab indicator readable and functions properly | CFR 43.13                 |
|     |          |      | Emergency brake handle installed                   | CFR 21.31                 |



| N/A | Not Sat. | Sat. | Equipment Furnishings   |   |
|-----|----------|------|---|---|
|     |          |      | Batteries proper installation. charging                               | CAR 3.683, CFR 23.1353  |
|     |          |      | Battery vented overboard  | CAR 3.683, CFR 23.1353<br>AC 43.13-1B Para 11-22                              |
|     |          |      | Battery NiCad gage for thermal run away                               | CFR 23.1353   |
|     |          |      | Thermal/Noise insulation  | CFR 23.853  |
|     |          |      | Relief tube, corrosion areas  | CFR 43.13   |
|     |          |      | New interior material Certs.  | CAR-3.388, CFR 23.853/25.853  |
|     |          |      | Interior replaced Yes No New  |   |
|     |          |      | Have Burn Certifications  |   |
|     |          |      | Seat covers, sheep skin material Certs.                               | CAR-3.388, CFR 23.853   |
|     |          |      | Seat covers ( <b>automotive</b> ) require burn certification          | CFR 23.853  |
|     |          |      | Worn seat material  | CFR 25.853 For a CAR-3.388 aircraft<br>Part 91, 23.853, AC 43.13-1B Para 9-61 |
|     |          |      | Has interior been altered or material substituted                     | CFR 21.303/43.11  |
|     |          |      | Seat back locks broke   | CAR 3.390, CFR 23.785   |
|     |          |      | Seat rails holes elongated Yes No Check AD.                           | CFR 39  |
|     |          |      | Seating configuration, how many seats allowed                         | TCDS  |
|     |          |      | Head rest missing and not on equipment list                           | CFR 91.9  |
|     |          |      | Seat belts for stitching, cuts, or frayed                             | CFR 91.107, 23.785  |
|     |          |      | Seat belts proper storage and marking                                 | CAR 3.715 TSO-22, 23.785  |
|     |          |      | Seat Belts Plastic locking ring missing, FWD AFT                      | CFR 45.14   |
|     |          |      | Seat belt secured when not is use                                     | CFR 23.785(d)   |
|     |          |      | TSO C-22 marking on seat belts CAR 3.390/715                          | CFR 45.15,<br>CFR 91.205(b)(13,14)  |
|     |          |      | <b>Shoulder harness required after July 18, 1978</b>                  | CFR 23.785(g)(1)  |
|     |          |      | <b>Shoulder harness required after Sept. 16, 1992(PAX) helicopter</b> |   |
|     |          |      | Cabin divider(s)/Curtains/Door(s)                                     | CFR 23.853  |
|     |          |      | Heating system/AD's/decay test  | CAR 3.388, CFR 23.859   |
|     |          |      | Cabin cooling (air conditioning), Ck                                  | CAR 3.393, CFR 23.831   |
|     |          |      | Outflow/Safety/Dump valve(s)condition                                 | CAR 3.394, CFR 23.843   |
|     |          |      | Pressurization seals /boots /gaskets condition                        | CAR 3.396, CFR 23.831   |
|     |          |      | Glare shield painted flat black                                       | CFR 23.773  |
|     |          |      | <b>Door latches lock</b>  | CFR 23.783  |
|     |          |      | a. Door sprung  | CAR 3.389, CFR 23.783   |
|     |          |      | b. Door Seals worn  | CAR 3.387, CFR 23.783   |
|     |          |      | c. Door slide track lock broken                                       | CAR 3.387, CFR 23.783   |

| N/A | Not Sat. | Sat. | Miscellaneous Fuselage                                    |                             |
|-----|----------|------|---|-----------------------------|
|     |          |      | Cabin pressure controller service compressor 24 months    | CAR 3.395, CFR 23.843       |
|     |          |      | Pressurization seals /boots /gaskets, voids, and cracks   | CFR 23.843                  |
|     |          |      | Antenna installation doubles per                          | AC 43.13 2A, CFR 23.571/572 |
|     |          |      | Corrosion on antenna's                                    | CAR 3.395, CFR 23.609       |
|     |          |      | Fabric covered aircraft condition good poor               | AC 43.13-1B Chap 2          |
|     |          |      | Emergency exit placards                                   | CAR 3.768, CFR 23.1557(d)   |
|     |          |      | Any addition mirrors installed on wings requires Form 337 | CFR 43 App A                |
|     |          |      | Condition of paint, is corrosion present NOT allowed      | CAR 3.295, CFR 23.609       |

| N/A | Not Sat. | Sat. | Aircraft exterior inspection   |                                     |
|-----|----------|------|--|-------------------------------------|
|     |          |      | Wash and clean all oil, grease and dirt from aircraft  | CFR 43 App D                        |
|     |          |      | Nationality and registration marks per, CFR 45.29 Check 3 inch marking per date Jan. 1, 1983 and repaint. Over 30 years 2 or 12 inch | CFR 45.22(b)                        |
|     |          |      | Rotating beacon installation proper doubler Required after 08-11-71,   | CFR 23.1401                         |
|     |          |      | Anticollision light system installed   | CAR 3.705,<br>CFR 91.209(b),23.1401 |
|     |          |      | Anticollision light installed after 03/11/1996 Red or white,   | CFR 91.206(b)(11)                   |
|     |          |      | AFT nav light proper color white   | CAR 3.702, CFR 23.1385-1399         |
|     |          |      | Panel seams miss match, extra paint in front of static port  | CFR 23.1325                         |
|     |          |      | Static ports paint in hole or other things L/H R/H   | CAR 3.665, CFR 23.1325              |
|     |          |      | Static vent painted over L/H R/H   | L/H R/H CAR 3.665,<br>CFR 23.1325   |
|     |          |      | Pitot heat indicator amber light   | CFR 23.1326                         |
|     |          |      | Pitot heat element operational   | CFR 23.1326                         |
|     |          |      | Pitot tube worn around hole  |                                     |
|     |          |      | a. Air Speed Last inspection date _____  | CFR 23.1325                         |
|     |          |      | <b>Static wicks</b>  | CFR 23.867                          |
|     |          |      | a. Right wing  |                                     |
|     |          |      | b. Left wing   |                                     |
|     |          |      | c. Right elevator  |                                     |
|     |          |      | d. Left elevator   |                                     |
|     |          |      | e. Rudder  |                                     |

| N/A | Not Sat. | Sat. | Landing Gear  |                         |
|-----|----------|------|---|-------------------------|
|     |          |      | Correct tire and wheel for the aircraft                     | CAR 3.362 CFR 23.733    |
|     |          |      | Tire service Main ____ R L Nose Tire                        | CAR 3.362 CFR 23.733    |
|     |          |      | Tires condition wear, cuts, or weather cracking L/H R/H NLG | AC 43.13 para 9-14      |
|     |          |      | Landing Gear struts leaking L/H R/H NLG                     | AC 43.13 par 9-2/4      |
|     |          |      | Landing gear struts extension L/H _____ R/H _____           | AC43.13 para 9-2/4      |
|     |          |      | Landing gear fairing condition L/H ____ R/H ____ Nose ____  | CFR 23.607, CFR 23.1193 |
|     |          |      | Fairing cracked , Hardware missing .                        | CFR 23.607/1193         |
|     |          |      | Landing gear fairings missing, check equipment list and W&B | CFR 21.29               |
|     |          |      | Steering shimmy dampener leaking, won't track               | CFR 23.745              |

| N/A | Not Sat. | Sat. | Landing Gear   |  |
|-----|----------|------|--|--|
|     |          |      | Brake pads worn. L/H R/H 0.100 in-thickness min.                       | CAR 3.363 CFR23.735                      |
|     |          |      | Brake lines condition, frayed, corrosion on fittings L/H R/H           | CFR 23.735                               |
|     |          |      | Brake rotor corrosion, warped, or under size L/H RH                    | CFR 23.735                               |
|     |          |      | MLG strut / axle / torque links L/H condition                          | CFR 23.721                               |
|     |          |      | MLG strut / axle / torque links R/H condition                          | CFR 23.721                               |
|     |          |      | NLG strut / axle / torque links L/H condition                          | CFR 23.721                               |
|     |          |      | MLG L/H door actuating system / Hoses condition                        | CFR 23.1435                              |
|     |          |      | MLG R/H door actuating system / Hoses condition                        | CFR 23.1435                              |
|     |          |      | NLG door actuating system / Hoses condition                            | CFR 23.1435                              |
|     |          |      | MLG L/H Landing gear actuator switch(s) condition                      | CFR 23.729                               |
|     |          |      | MLG R/H Landing gear actuator switch(s) condition                      | CFR 23.729                               |
|     |          |      | Repack wheel bearings<br>R/H Main _____ L/H Main _____ Nose Gear _____ | CRR 43 Appendix D                        |
|     |          |      | Wheel nut cotter pin proper length and installed correctly             | AC 43.13-1-B                             |
|     |          |      | NLG Landing gear actuator switch(s) condition                          | CFR 23.729                               |
|     |          |      | Land gear strut chrome damaged   | reference manufacture maintenance manual |
|     |          |      | Landing light covers cracked, missing hardware L/H R/H                 | CFR 23.729                               |
|     |          |      | Position / Warning / Safety squat switch or (WOW) switch               | CFR 23.729                               |
|     |          |      | Emergency extension / blow down  | CAR 3.358 CFR 23.729                     |
|     |          |      | Gear Emergency operation does it work                                  | CAR 3.357 CFR 23.729                     |
|     |          |      | Landing Gear Retract/Extension System                                  | CAR 3.356 CFR 23.729                     |
|     |          |      | Main landing gear locking mechanism for operation                      | CRR 43 Appendix D                        |
|     |          |      | Main gear trunion strut bushings for wear L/H R/H                      | CFR 43.13                                |
|     |          |      | Main gear bungee cord condition L/H R/H Manufacture manual             |  |
|     |          |      | Main landing & nose gear lubrication while on jacks L/H R/H            | CFR 43.13                                |
|     |          |      | Lube type of grease used per manufacture _____                         | CFR 43.16                                |
|     |          |      | Floats and skis for security and defects                               | CRR 43 Appendix D                        |

| Landing Gear          | Specification |           |      | Actual  |           |      |
|-----------------------|---------------|-----------|------|---------|-----------|------|
| Actuator cushion      | Up ____       | Down ____ |      | Up ____ | Down ____ |      |
| Down lock over center | N __          | L __      | R __ | N __    | L __      | R __ |
| Down Lock clearance   | N __          | L __      | R __ | N __    | L __      | R __ |
| Up lock clearance     | N __          | L __      | R __ | N __    | L __      | R __ |
| Up lock cable tension | N __          | L __      | R __ | N __    | L __      | R __ |

| N/A | Not Sat. | Sat. | Hydraulic System                                  |                        |
|-----|----------|------|---|------------------------|
|     |          |      | Hydraulic Distribution/Hoses condition/life limit | CAR 3.726, CFR 23.1435 |
|     |          |      | Hydraulic pressure relief valve                   | CFR 23.1435            |
|     |          |      | Hydraulic accumulator charge                      | CAR 3.728, CFR 23.1435 |
|     |          |      | Hydraulic reservoir/venting                       | CFR 23.1435            |
|     |          |      | Hydraulic filter change life limit                | CFR 23.1435            |
|     |          |      | Hydraulic electric motor brushes and condition    | CFR 23.1351            |

| N/A | Not Sat. | Sat. | Left Wing   |                       |
|-----|----------|------|---|-----------------------|
|     |          |      | Wing attach fittings for cracks, elongated bolt holes | CAR 3.317, CFR 23.572 |
|     |          |      | Wing dents, cracks, Loose rivets, Corrosion,          |                       |
|     |          |      | Nav light red   | CFR 23.603/1385       |
|     |          |      | Wing Fuel Vent(s) direction check AD's                | CFR 23.975            |
|     |          |      | Flaps cracks _____, loose hardware _____,             | CAR 3.339             |
|     |          |      | Properly installed _____                              | CFR 23.655/697        |
|     |          |      | Flap track width AD complied with                     |                       |
|     |          |      | Aileron cracks _____, loose hardware _____,           |                       |
|     |          |      | Properly installed _____                              |                       |
|     |          |      | Stop drilled cracks properly done                     |                       |

| N/A | Not Sat. | Sat. | Right Wing  |                       |
|-----|----------|------|---|-----------------------|
|     |          |      | Wing attach fittings for cracks, elongated bolt holes | CAR 3.317, CFR 23.572 |
|     |          |      | Wing dents, cracks, Loose rivets, Corrosion,          |                       |
|     |          |      | Nav light green                                       | CFR 23.603/1385       |
|     |          |      | Wing Fuel Vent(s) direction check AD's                | CFR 23.975            |
|     |          |      | Flaps cracks _____, loose hardware _____,             | CAR 3.339             |
|     |          |      | Properly installed _____                              | CFR 23.655/697        |
|     |          |      | Flap track width AD complied with                     |                       |
|     |          |      | Aileron cracks _____, loose hardware _____,           |                       |
|     |          |      | Properly installed _____                              |                       |
|     |          |      | Stop drilled cracks properly done                     |                       |

| N/A | Not Sat. | Sat. | Rigging   |                                  |
|-----|----------|------|---|----------------------------------|
|     |          |      | Cable rigging loose Annual/100 hour inspection  | CAR 3.337, CFR 23.655/685/689    |
|     |          |      | Deicer boots condition worn, holes, debonded, type  | CAR .7127, CFR 23.1416/1419      |
|     |          |      | Rudder moves up, down, bearing loose, cracks, repairs   | CAR 3.332, CFR 23.685            |
|     |          |      | Rudder/trim tab attach fittings condition, loose  | CAR 3.337, CFR 23.685            |
|     |          |      | Lubrication, systems lube per manufactures recommendations  | CFR 43.13                        |
|     |          |      | Electrical bonding straps broken or frayed  | CAR 3.337-1, CFR 23.867          |
|     |          |      | L/H Horizontal Stab cracks , Loose rivets , Hardware installation and safetied , Stop drill cracks Stops _____, | CFR 23.572 CFR 23.675            |
|     |          |      | R/H Horizontal Stab cracks Loose rivets Hardware installation and safetied Stop drill cracks Stops _____,       | CFR 23.572, CFR 23.675           |
|     |          |      | <b>Elevator</b>   |                                  |
|     |          |      | Stopped drilled holes in elevator without doublers R/H  | CFR 23.572                       |
|     |          |      | Stopped drilled holes in elevator without doublers L/H  | CFR 23.572                       |
|     |          |      | Elevator trim control system rigging  | CAR 3.337, CFR 23.659            |
|     |          |      | Elevator trim indicator control works   | CAR 3.337, CFR 23.677(a)         |
|     |          |      | Elevator/trim tab attach fittings L/H   | CAR 3.337, CFR 23.572            |
|     |          |      | Elevator/trim tab attach fittings R/H   | CAR 3.337, CFR 23.572            |
|     |          |      | Elevator trim/servo tab structure L/H   | CAR 3.337, CFR 23.572            |
|     |          |      | Elevator trim/servo tab structure R/H   | CAR 3.337, CFR 23.572            |
|     |          |      | Control surface attach fittings condition   | CAR 3.328, CFR 23.572            |
|     |          |      | Control surface balancing all primary controls after repair or paint  | CAR 3.159, CFR 23.659            |
|     |          |      | STOL devices/control system condition   | CFR 23.572                       |
|     |          |      | Boundary layer control/vortex generators, cracks and condition  | CFR 23.572                       |
|     |          |      | Flight Control Surface Travels/Cable Tension  | CAR 3.345, CFR 23.143            |
|     |          |      | Gust lock, condition, worn holes  | CAR 3.341, CFR 23.572            |
|     |          |      | Autopilot trim indicator annual/100 hour check rigging  | CAR 3.343, CFR 23.143            |
|     |          |      | Autopilot system condition  | CFR 23.143                       |
|     |          |      | Yaw damper condition  | CAR 3.347, CFR 23.143            |
|     |          |      | Electric trim rigging and condition   | CAR 3.343, CFR 23.143            |
|     |          |      | <b>Flight Controls</b>  |                                  |
|     |          |      | Flight control pulleys worn, broken, or frozen up   | CAR 3.345, CFR 23.689            |
|     |          |      | Flight control cables broken strands/rust   | FR 23.689<br>Reference AC 43.13C |
|     |          |      | Flight control Surface Travel/Cable Tension   | CAR 3.345, CFR 23.391–23.459     |

# Rigging

Ambient Air Temperature: \_\_\_\_\_

|                     | Travel - Left |          |         | Travel - Right |          |         |
|---------------------|---------------|----------|---------|----------------|----------|---------|
|                     | Spec          | As Found | As Left | Spec           | As Found | As Left |
| Control Column      |               |          |         |                |          |         |
| Aileron             | ↑             | ↑        | ↑       | ↑              | ↑        | ↑       |
|                     | ↓             | ↓        | ↓       | ↓              | ↓        | ↓       |
| Aileron Trim Tabs   | ↑             | ↑        | ↑       | ↑              | ↑        | ↑       |
|                     | ↓             | ↓        | ↓       | ↓              | ↓        | ↓       |
| Elevator/Stabilator | ↑             | ↑        | ↑       | ↑              | ↑        | ↑       |
|                     | ↓             | ↓        | ↓       | ↓              | ↓        | ↓       |
| Elev/Stab Trim      | ↑             | ↑        | ↑       | ↑              | ↑        | ↑       |
|                     | ↓             | ↓        | ↓       | ↓              | ↓        | ↓       |
| Elev/Stab Tab(s)    |               |          |         |                |          |         |
| Flaps               | ↑             | ↑        | ↑       | ↑              | ↑        | ↑       |
|                     | ↓             | ↓        | ↓       | ↓              | ↓        | ↓       |
| Moveable Stabilizer |               |          |         |                |          |         |
| Rudder              |               |          |         |                |          |         |

| Tension             | Spec | As Found | As Left | Notes: |
|---------------------|------|----------|---------|--------|
| Control Column      |      |          |         |        |
| Aileron             |      |          |         |        |
| Elevator/Stabilator |      |          |         |        |
| Elev/Stab Trim      |      |          |         |        |
| Flap                |      |          |         |        |
| Moveable Stabilizer |      |          |         |        |
| Rudder              |      |          |         |        |
| Autopilot Servo     |      |          |         |        |

## Flaps

|       | @ 0°     |         | @ 10°    |         | @ 20°    |         | @ 30/40° |         |
|-------|----------|---------|----------|---------|----------|---------|----------|---------|
|       | As Found | As Left | As Found | As Left | As Found | As Left | As Found | As Left |
| Spec  | ↑        |         | ↑        |         | ↑        |         | ↑        |         |
|       | ↓        |         | ↓        |         | ↓        |         | ↓        |         |
| Left  | ↑        | ↑       | ↑        | ↑       | ↑        | ↑       | ↑        | ↑       |
|       | ↓        | ↓       | ↓        | ↓       | ↓        | ↓       | ↓        | ↓       |
| Right | ↑        | ↑       | ↑        | ↑       | ↑        | ↑       | ↑        | ↑       |
|       | ↓        | ↓       | ↓        | ↓       | ↓        | ↓       | ↓        | ↓       |

# Engine Inspection

Engine Type Certificate Number T/C \_\_\_\_\_ Rev. \_\_\_\_\_

Engine Part Number \_\_\_\_\_ S/N \_\_\_\_\_

| N/A | Not Sat. | Sat. | Reference CAR Subpart E, CFR 23 Subpart E Powerplant, and 43 App D   |
|-----|----------|------|--|
|     |          |      | Thoroughly clean the engine<br>CFR 43 App. D   |
|     |          |      | Perform engine static run<br>CFR 33.26, 43.15  |
|     |          |      | Perform engine idle run R.P.M. check<br>CFR 33.26, 43.15   |
|     |          |      | Perform mag drop check<br>CFR 33.37  |
|     |          |      | Mag "P" lead wires not cracked or broken<br>CFR 33.28  |
|     |          |      | Shut down engine and check for engine oil and fuel leaks<br>CFR 33.25  |
|     |          |      | Engine Data plate installed<br>CAR 3.670, CFR 45.13  |
|     |          |      | L/H engine Make Model/Series matches TCDS<br>CFR 45.13   |
|     |          |      | R/H engine Make Model/Series matches TCDS<br>CFR 45.13   |
|     |          |      | Certification basic of components installed 337's<br>CFR 45.15   |
|     |          |      | Instruments, CFR 23.1305 instruments   |
|     |          |      | Cylinder head temperature<br>CFR 43.15   |
|     |          |      | Oil temperature check<br>CFR 43.15   |
|     |          |      | Engine<br>CFR 23.1301  |
|     |          |      | Accessories<br>CFR 23.1301   |
|     |          |      | Engine cowl loose/missing hardware Location _____<br>CAR 3.625, CFR 23.1193  |
|     |          |      | Firewall bent, cracked, or missing fasteners<br>CAR 3.623, CFR 23.1191   |
|     |          |      | Firewall wire and hose grommets condition<br>CAR 3.623, CFR 23.1191(c)   |
|     |          |      | Firewall has corrosion<br>CAR 3.624, CFR 23.1191(e)  |
|     |          |      | Engine mount structure for cracks, dents, etc.<br>CFR 23.23  |
|     |          |      | Retorque cylinder base nuts and case half per manufacture recommendations  |
|     |          |      | Engine shock mount cracks, worn, hardware condition<br>CFR 33.33   |
|     |          |      | Flex tubing condition weather cracking, worn, etc.<br>CAR 3.638, CFR 23.1183   |
|     |          |      | Engine oil leaking Location _____<br>CAR 3.638, CFR 23.1183  |
|     |          |      | STC for Bracket air filter if installed, Form 337<br>CFR 21.111, 1091  |
|     |          |      | Air Filter dirty/foreign particles<br>CAR 3.605, CFR 23.1107   |
|     |          |      | Condition of baffle seals and installation Good Poor Substituted<br>type of baffle material<br>CAR 3.625, CFR 33.15,17,21, CFR 23.1043 |
|     |          |      | Wire chafing, fuel lines, no wires clamped under them<br>CAR 3.681 AC 43.13-1B   |
|     |          |      | Electrical wire Slack between supports Max 1/2 inch<br>AC 43.13-1B Fig. 11.9   |
|     |          |      | Engine/Electric fuel pump condition wires, mounting Good/worn<br>CFR 23  |
|     |          |      | Ignition harness condition Good _____ Worn _____<br>CFR 23   |
|     |          |      | Clean and gap spark plugs per engine manufactures recommendations  |
|     |          |      | Rotate spark plugs per manufacture recommendation<br>(One gasket required)   |
|     |          |      | Starter ring broken teeth<br>CFR 23  |
|     |          |      | Alternator/generator drive belts condition worn, cracked, broke<br>CFR 23  |
|     |          |      | Cylinders cracked fins, rocker cover leaking<br>1 2 3 4 5 6  |
|     |          |      | Cylinders barrel cracked (Chrome)<br>1 2 3 4 5 6   |
|     |          |      | Cylinders check records for times, certifications<br>1 2 3 4 5 6   |
|     |          |      | Exhaust stacks cracks, defects, installation<br>1 2 3 4 5 6<br>CAR 3.615, CFR 23. 1121, 33.21  |

| N/A | Not Sat. | Sat. | Reference CAR Subpart E, CFR 23 Subpart E Powerplant, and 43 App D  |
|-----|----------|------|---|
|     |          |      | Muffler cracked, location _____, Recurring AD's   |
|     |          |      | Muffler leak test to 2 psi internal pressure  |
|     |          |      | Rocker cover or push rods leaking oil past seals  |
|     |          |      | Preheater shroud condition cracks, vibration  |
|     |          |      | Carburetor heat box condition of holes  |
|     |          |      | a. Proper hardware screws and nuts  |
|     |          |      | Engine controls properly safetying travel   |
|     |          |      | Engine case nuts torqued and right side up  |
|     |          |      | Crankcase for cracks, leaks and security of seam bolts  |
|     |          |      | Engine mounts for corrosion, cracks NONE Allowed  |
|     |          |      | Cowl flap control and operational limitations   |
|     |          |      | Cowl flap check for cracks  |
|     |          |      | Alternate/ Ram air/Carb heat  |
|     |          |      | Turbo Waste gate (Non automatic)  |
|     |          |      | Vacuum pump lines, clamps condition Good Worn   |
|     |          |      | Supercharger overall condition<br>Good Bad  |
|     |          |      | Electrical wiring cracked, burned, broken   |
|     |          |      | Oil filter opening placard  |
|     |          |      | Drain oil   |
|     |          |      | Clean oil screen  |
|     |          |      | Replace oil filter  |
|     |          |      | Check filter for metal particles in accordance with manufacture   |
|     |          |      | Oil drain plug/valve condition and positive locking   |
|     |          |      | Oil radiator supporting structure for security  |
|     |          |      | Oil tanks condition and free of vibration   |
|     |          |      | Hose inspection/replacement manufacture limits  |
|     |          |      | Mechanic has a master orifice for differential compression tester (MFG requirement)   |
|     |          |      | Differential Compression Test, 80 psi /60 psi cylinder<br>1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____<br>If 25% difference check cylinder for problems.<br>Hot/Warm/Cold Tach Time: _____ Master Orifice _____ Lbs<br>Differential Pressure Tester Serial # _____ Calibration Due _____ |

| N/A | Not Sat. | Sat. | Propeller Inspection   |
|-----|----------|------|--|
|     |          |      | Propeller Type Certificate Number<br>T/C _____ Rev. _____        |
|     |          |      | Propeller Part Number _____ S/N _____                            |
|     |          |      | Propeller Part number and serial number                          |
|     |          |      | Is there a propeller maintenance record (log book)               |
|     |          |      | If no propeller log book sign 100-hour off in airframe record    |
|     |          |      | Propeller seal leaking   |
|     |          |      | Propeller for nicks, cracks, and damage                          |
|     |          |      | File marks after dressing propeller NOT allowed                  |
|     |          |      | Mechanic record entry after dressing nicks                       |
|     |          |      | Propeller spinner had doubler added to repair cracks Not ALLOWED |



| N/A | Not Sat. | Sat. | Propeller Inspection   |                             |
|-----|----------|------|--|-----------------------------|
|     |          |      | Propeller spinner(s) cracks ____, NO cracks allowed nuts safety wired<br>__ Missing screws from spinner None allowed ____ Reference Service<br>Letters if cracked: |                             |
|     |          |      | Sensenich See aircraft maintenance manuals   |                             |
|     |          |      | McCauley 1992-14C -part must be replaced   |                             |
|     |          |      | Hartzell HC-SL-61-91 Requires a Field Approval   |                             |
|     |          |      | Propeller grinding when rotating   | AC 43.13-1B Para 8-2(c )(2) |
|     |          |      | Corrosion pitting on blades or hub None Allowed  | CFR A35.3                   |
|     |          |      | Paint on propeller blades, type per manufacture manual   | CAR 3.295, CFR 23.609       |
|     |          |      | If repainted after rework type of paint applied lacquer base or<br>polyurethane enamel and was it recorded in the propeller maintenance<br>record                  | CFR 43.5                    |
|     |          |      | STC for different propeller than original per TCDS   | CFR 21.111                  |
|     |          |      | STC propeller check engine gages for new limitations   | CFR A35.4                   |
|     |          |      | Is the propeller the right diameter/width  | CAR 3.416, CFR 23.45        |
|     |          |      | Propeller ground clearance   | CAR 3.422, CFR 23.925       |
|     |          |      | Have the propeller tips been altered (rounded or square)   | CFR 43 Append A             |
|     |          |      | Are there repairs in the propeller maintenance records   | CFR 43.9                    |
|     |          |      | Has the shotpeen been removed after reworked at hub  | CFR 43.9                    |
|     |          |      | Has the hub seal been replaced (service life)  | CFR 43.9                    |
|     |          |      | Prop Hub is oil/grease filled and/or leaking   | CFR 35.3                    |
|     |          |      | When was the last hub overhaul   | CFR 35.3                    |
|     |          |      | Pitting corrosion on Hub NONE ALLOWED  | CFR 35.3                    |
|     |          |      | Hub, blade clamps, and pitch change mechanisms should be inspected<br>for corrosion NONE ALLOWED   | CFR A35.3                   |
|     |          |      | Were new propeller bolts installed   | CFR A35.3                   |
|     |          |      | Were new nuts used on the propeller bolts  | CFR A35.3                   |
|     |          |      | New cotter pins installed in retaining nuts per Manufacture  | CFR A35.4                   |
|     |          |      | Is the spinner shimmed to the spinner bracket if required  | CFR A35.3                   |
|     |          |      | Pitch change counterweights on blade clamps should be inspected for<br>security, safety  | CFR A35.3                   |
|     |          |      | Adequate counterweight clearance within the spinner  | CFR 23.925                  |
|     |          |      | De-icer boots for signs of deterioration and security  | CFR 23.929                  |
|     |          |      | Propeller total time is recorded in propeller record   | CFR 91.417(2)               |
|     |          |      | Propeller vibration rate   | CAR 3.431, CFR 23.907       |
|     |          |      | Propeller clearance to ground and gear   | CAR 3.417, CFR 23.925       |
|     |          |      | Check blade play and blade track.  | CFR 43.13, 23.925           |
|     |          |      | Lubricate the propeller assembly. Refer to Hartzell Service Letter HC-<br>SL-61-184 for procedure. (If you have a Hartzell)  | CFR 43.13                   |
|     |          |      | Propeller backing plate made of composite check propeller hub for<br>pitting corrosion   |                             |

| N/A | Not Sat. | Sat. | <b>Avionics Installed</b>   |
|-----|----------|------|---|
|     |          |      | Type of Avionics: List by part number and serial number. CAR 3.72 1 |
|     |          |      | ALTIMETERS  |
|     |          |      | ENCODING  |
|     |          |      | Mfg: ACK Model: ACK 30  |
|     |          |      | Type of Avionics: AUDIO PANEL                                       |
|     |          |      | Mfg: KING Model: KMA 20   |
|     |          |      | Type of Avionics: COLLISION AVOIDANCE SYSTEMS                       |
|     |          |      | Mfg: RYAN INTERNATIONAL CORPORATION Model: ATS 7000                 |
|     |          |      | Type of Avionics: GPS   |
|     |          |      | Mfg: KING Model: KLN 90   |
|     |          |      | Type of Avionics: RNAV  |
|     |          |      | Mfg: KING Model: KNS 80   |
|     |          |      | Type of Avionics: LOC   |
|     |          |      | Mfg: KING Model: KI 208   |
|     |          |      | Type of Avionics: NAV-COMM  |
|     |          |      | Mfg: KING Model: KX 170 B Channels: 720                             |
|     |          |      | Type of Avionics: COMM  |
|     |          |      | Mfg: KING Model: KY 197 Channels: 720                               |
|     |          |      | Type of Avionics: TRANSPONDERS                                      |
|     |          |      | Mfg: KING Model: KT 76A   |
|     |          |      | Type of Avionics: STORMSCOPE  |
|     |          |      | Mfg: 3 M Model: WX 1000+  |
|     |          |      | Type of Avionics: GS  |
|     |          |      | Mfg: KING Model: KI 201   |
|     |          |      | Type of Avionics: AUTOPILOTS  |
|     |          |      | Mfg: S-TEC Model: SYSTEM 60 PSS                                     |
|     |          |      | Mfg: CENTURY Model: CENTURY II B                                    |

| N/A | Not Sat. | Sat. | <b>De-Icing Systems</b>                          |
|-----|----------|------|--|
|     |          |      | Known Ice System: CFR 23.1416                    |
|     |          |      | Ice Lights work and condition CFR 23.1416        |
|     |          |      | Prop De-Ice condition CFR 23.1416                |
|     |          |      | De-Ice Type: CFR 23.1416                         |
|     |          |      | Wing Tail Boots condition CAR 3.712, CFR 23.1416 |
|     |          |      | Boots Condition: CAR 3.712, CFR 23.1416          |
|     |          |      | Windshield De-Ice condition CFR 23.1416          |
|     |          |      | Windshield Wipers condition CFR 23.1416          |
|     |          |      | Jet Intake De-Ice condition CFR 23.1416          |
|     |          |      | Pitot Heat condition CFR 23.1416                 |

| N/A | Not Sat. | Sat. | Additional Equipment  |                        |
|-----|----------|------|---|------------------------|
|     |          |      | Dual Controls:  | CFR 23.777             |
|     |          |      | Type: Yoke.   | CFR 23.777             |
|     |          |      | Stall Warning System works                                  | CFR 23.703             |
|     |          |      | Stick Shaker works  | CFR 23.672             |
|     |          |      | Rotating Beacon works                                       | CAR 3.703, CFR 23.1401 |
|     |          |      | Strobe Light works  | CFR 23.1401            |
|     |          |      | Taxi Lights works   | CAR 3.655, CFR 23.1383 |
|     |          |      | Navigation Light works                                      | CAR 3.661, CFR 23.1389 |
|     |          |      | Long Range Fuel   | CFR 23.959             |
|     |          |      | Aux Fuel Qty works  | CFR 23.955             |
|     |          |      | Single Point Refuel condition                               | CFR 23.953             |
|     |          |      | Lavatory condition  | CFR 23.1561            |
|     |          |      | Galley condition  | CFR 23.1561            |
|     |          |      | Cabinetry condition   | CFR 23.1561            |
|     |          |      | Other Equipment condition                                   | CAR 3.725, CFR 23.1561 |
|     |          |      | Intercom System works                                       | CFR 23.1561            |
|     |          |      | Entertainment equipment CD player check for alteration form | CFR 43 App. A          |
|     |          |      | Gap seal kit installed                                      | CFR 43 App. A          |
|     |          |      | Brackett Aero Filter STC installed                          | CFR 43 App. A          |
|     |          |      | Air Filter replacement date Bracket air filter check hours  | CFR 43 App. A          |

| N/A | Not Sat. | Sat. | Special Inspections   |               |
|-----|----------|------|---|---------------|
|     |          |      | Airworthiness Directives AD's                                       | CFR 39        |
|     |          |      | Engine fuel and oil lines   |               |
|     |          |      | Brake lines   |               |
|     |          |      | Air filter engine   |               |
|     |          |      | Air filter instruments  |               |
|     |          |      | Wing structural areas   |               |
|     |          |      | Hard and over weight landings                                       |               |
|     |          |      | Lighting strike damage  |               |
|     |          |      | Hail damage   |               |
|     |          |      | Severe Turbulence Inspection  |               |
|     |          |      | Corrosion damage Inspection   |               |
|     |          |      | Radio Equipment   |               |
|     |          |      | Emergency Locater Transmitter (ELT)                                 | CFR 91.207    |
|     |          |      | Pitot Static  | CFR 91.411    |
|     |          |      | Transponder   | CFR 91.411    |
|     |          |      | Rigging checks  | CFR 43 App. D |
|     |          |      | New Weight and balance aircraft for compensation/hire               |               |
|     |          |      | Magneto 200, 500 and etc. coil, contacts, etc. Inspection           |               |
|     |          |      | Rigging Inspection  |               |
|     |          |      | Oxygen bottles Inspection/Hydrostatic Tests                         |               |
|     |          |      | Lubrication Inspection  |               |
|     |          |      | Hose Inspection Fuel and Hydraulic                                  |               |
|     |          |      | Compass magnetic direction within 10°. Compass card                 | CFR 23.1327   |
|     |          |      | Airspeed indicator inspections                                      | CFR 23.1323   |
|     |          |      | Remove the rocker box covers and check for freedom of valve rockers |               |

| N/A | Not | Sat. | Miscellaneous Items   |
|-----|-----|------|---|
|     |     |      | Aileron control cable not over pulley   |
|     |     |      | Aileron cable improperly installed in bellcrank/cable retaining pin was not installed |
|     |     |      | Bolts loose on the vertical and horizontal stabilizer fin attachments                 |
|     |     |      | Broken and cracked electrical terminals   |
|     |     |      | Control cable turnbuckles not safetied  |
|     |     |      | Flap follow-up cable chafing on brake line  |
|     |     |      | Foreign items in fuel cells/tanks   |
|     |     |      | Fuel lines twisted, bent, kinked, obstructing flow                                    |
|     |     |      | Fuel lines chafing - inadequate clamping  |
|     |     |      | Incorrect propeller bolts installed   |
|     |     |      | Jam nuts drilled but no safety wire installed   |
|     |     |      | Lock clips missing from control cable turnbuckles                                     |
|     |     |      | Loose rivets in horizontal stabilizer leading edge                                    |
|     |     |      | Main wheel tires do not clear wheel bays  |
|     |     |      | Numerous drill chuck marks in aft face of pressure bulkhead.                          |
|     |     |      | Oil lines leaking at connections  |
|     |     |      | Primer line "T" fitting not installed   |
|     |     |      | Propeller blade retention ferrules under torqued                                      |
|     |     |      | Elevator trim cable wrapped around primary rudder control cable                       |
|     |     |      | Rivet holes drilled but rivets not installed, different areas                         |
|     |     |      | Rudder cable bellcrank attach bolts loose   |
|     |     |      | Rudder cable bolts fitted upside down   |
|     |     |      | Unreliable fuel quantity indications  |

## Life limits, CFR 43.10

**This checklist is not exhaustive and does not supersede  
Manufacture's publications and is up-dated periodically!**

| Calendar/Hourly Life limited Items:         | Years        | Hours        |
|---|--------------|--------------|
| <b>Airframe</b>                             |              |              |
| Gyro air filters, central                   | 5            | 500          |
| Non-Teflon fuel, oil, and hydraulic hoses   | 15           | 3000         |
| Teflon fuel, oil, and hydraulic hoses       | 20           | 4000         |
| Seat belt/shoulder harness webbing          | 20           |              |
| Stabilizer attach bolts                     | 25           | 6000         |
| Wing bolts                                  | 25           | 6000         |
| <b>Engine</b>                               |              |              |
| Engine shock mounts                         | 15           | TBO          |
| Non-Teflon fuel, oil, and hydraulic hoses   | 8            | TBO          |
| Teflon fuel, oil, and hydraulic hoses       | 15           | TBO          |
| Continental Engines                         |              | 2000 SL 98-9 |
|   |              |              |
| <b>Special Inspection Items:</b>            | <b>Years</b> | <b>Hours</b> |
| <b>Airframe</b>                             |              |              |
| Gyro air pump carbon vanes                  | 6            | 500          |
| Electric hydraulic pump motor               | 15           | 500-1500     |
| Electro mechanical gear actuator            | 15           | 3000         |
| Gear actuator motor brushes                 | 2            | 250          |
| Gear motor internal inspection/lubrication  | 15           | 3000         |
| Flight control trim actuator(s)             | 15           | 4500         |
| Electrical flap actuators/motors            | 20           | 4000         |
| Stabilizer mounting bolts torque inspection | 5            |              |
| Wing attach bolts torque inspection         | 5            |              |
|   |              |              |
| <b>Propeller</b>                            |              |              |
| Fixed pitch propeller recondition           | 6            | 2000         |
| Mounting hardware                           | 20           | 2000         |
| Constant speed propeller overhaul           | 6            | 2400         |
| Prop governor reseal                        | 15           | 1500         |
| Governor (Woodward)                         | 5            | 2400         |
| Accumulators                                | 5            | 1800         |

| <b>Special Inspection Items:</b>           | <b>Years</b> | <b>Hours</b> |
|--|--------------|--------------|
| <b>Engine</b>                              |              |              |
| Alternator                                 | 500          |              |
| Gear drive alternator internal inspection  | 5            | 300          |
| Belt driven alternator internal inspection | 5            | 500          |
| Internal magneto inspection                | 5            | 500          |
| Valve inspection/dry lash clearance        | 15           | TBO          |
| Cam/cam follower inspection (TCM engines)  | 15           | mid life     |
| Bendix fuel injector servo overhaul        | 20           | TBO          |
| Pressure carburetor overhaul               | 20           | TBO          |
| Primer nozzles cleaned and spray pattern   | 5            |              |
| Continental unmetered fuel pressure check  | 2            | 400          |
| Diaphragm fuel pumps overhaul              | 20           | TBO          |
| Internal starter inspection                | 5            | mid-life     |
| Turbocharger oil inlet check valve(s)      | 10           | 1000         |
| Turbocharger oil scavenge check valves(s)  | 10           | 1000         |
| Hydraulic wastegate actuator(s) resealing  | 10           | 1000         |

**This is only a guide and should not be considered FAA approved data for life limits. Consult the manufacture recommendations, type certificate data sheets (TCDS), AD's, or the limitations section of FAA-approved airplane or rotorcraft flight manuals.**

## Miscellaneous Parts

| Category                  | Manufacturer | Part Number | Serial Number |
|---------------------------|--------------|-------------|---------------|
| Accumulators              |              |             |               |
| Air Conditioner           |              |             |               |
| Air Data Inertl Ref Unit  |              |             |               |
| Angle of Attack sensor    |              |             |               |
| Auxiliary Power Unit      |              |             |               |
| Ball/Swivel Quick Connctr |              |             |               |
| Cabin Doors               |              |             |               |
| Cabin Superchargers       |              |             |               |
| Circuit Breakers          |              |             |               |
| Cockpit Voice Record      |              |             |               |
| Coffee Makers             |              |             |               |
| Combustion Heaters        |              |             |               |
| Cylinder Assemblies       |              |             |               |
| Cylinder, Propane         |              |             |               |
| Dusting/Spraying Ops      |              |             |               |
| EFIS-Elec Flight Inst Sy  |              |             |               |
| Emergency/Survival Equip. |              |             |               |
| Emergency Pwr Supplies    |              |             |               |
| Engine Gage Units         |              |             |               |
| Fire Detectors            |              |             |               |
| Fire Ext Dischargers      |              |             |               |
| Fire Extinguishers        |              |             |               |
| Flight Data Recorder      |              |             |               |
| Flight Director Sys       |              |             |               |
| Flight Management Sy      |              |             |               |
| Floats                    |              |             |               |
| Fuel Cells                |              |             |               |
| Fuel Flow Transmitter     |              |             |               |
| Fuel Injected System      |              |             |               |
| Fuel Selector Valve       |              |             |               |
| Fuel System               |              |             |               |
| GPWS(Gnd Prxmty Warn Sys) |              |             |               |
| Gear Boxes                |              |             |               |
| Glass Fiber Fabrics       |              |             |               |
| Glider Tow Couplings      |              |             |               |
| Global Positioning System |              |             |               |
| Governors                 |              |             |               |
| Hardpoint Assemblies      |              |             |               |
| Hoists                    |              |             |               |
| Hoses                     |              |             |               |
| Ignition Switches         |              |             |               |
| Instrument Filters        |              |             |               |
| Integr. Avionics Computer |              |             |               |
| Landing Gear              |              |             |               |
| Lavatory Receptacles      |              |             |               |
| Lighting                  |              |             |               |
| Magnetic Compass System   |              |             |               |

| <b>Category</b>                  | <b>Manufacturer</b> | <b>Part Number</b> | <b>Serial Number</b> |
|----------------------------------|---------------------|--------------------|----------------------|
| Navigation Systems               |                     |                    |                      |
| Oxygen Masks                     |                     |                    |                      |
| Oxygen System                    |                     |                    |                      |
| Parachutes                       |                     |                    |                      |
| Piston Pin                       |                     |                    |                      |
| Pistons                          |                     |                    |                      |
| Pitot Static Heater              |                     |                    |                      |
| Protect Breathing Equip          |                     |                    |                      |
| Push-pull Control                |                     |                    |                      |
| Receiver(s)                      |                     |                    |                      |
| Refueling System                 |                     |                    |                      |
| Safety Belts                     |                     |                    |                      |
| Seat Track Fittings              |                     |                    |                      |
| Seats                            |                     |                    |                      |
| Smoke Detectors                  |                     |                    |                      |
| Speaker(s)                       |                     |                    |                      |
| Standby Vacuum Systems           |                     |                    |                      |
| Starting Vibrator                |                     |                    |                      |
| TCAS Terrain Collision Avoidance |                     |                    |                      |
| Tires                            |                     |                    |                      |
| Traffic Advisory System          |                     |                    |                      |
| Transducers                      |                     |                    |                      |
| Turbine Power Conversion         |                     |                    |                      |





