

## **PA-30 / PA-39 Pre-Buy Checklist**

- 1) Engine hours SMOH. Factory new? Factory reman? Field overhaul? If field O/H, were Lycoming cylinder kits used?
- 2) Replacement of engine hoses, lord mounts, hardware, and oil cooler at O/H and NDT of engine mounts.
- 3) Props. Calendar time since last overhaul. There is a 10-year time limit.
- 4) Prop governors. Were they overhauled when the engine was overhauled?
- 5) Nose gear stop limits. Are they sheared or broken?
- 6) Flap track and rollers. In the up position, can the flaps be wiggled? If so, the outer and maybe the middle tracks are worn. Are the rollers nylon or steel? If steel, replace with nylon rollers.
- 7) When was the 1000 hr gear inspection done?
- 8) Were the landing gear conduits replaced?
- 9) Were the landing gear microswitches and harness replaced? Is the green gear down light intermittent?
- 10) When was the side brace studs inspected? 1000 hr time limit.
- 11) When was the landing gear O rings and hydraulic fluid replaced. If longer than 500 hrs, recommend servicing because the main landing struts when in the down position is exposed to the engine exhaust stream and the hydraulic fluid becomes dirty.
- 12) Landing gear transmission/motor assembly. When were they last removed, cleaned, inspected and housing gear grease replaced with fresh Dukes #4 lubricant?
- 13) Flap gear and motor assembly. When were they last removed, cleaned, inspected and the housing grease replaced with Dukes #4 lubricant?
- 14) Fuel cells. When were they last replaced? If there is fuel smell in the cabin, the tops of the fuel cells could be porous.
- 15) Fuel selector valve assembly. When were these last overhauled? When the aircraft is parked and fuel drains from the aux tanks to the mains, it means that the fuel selector has an internal leak due to rust or aged O rings.
- 16) Fuel selector valve assembly microswitches and harness. Were these ever replaced?
- 17) Stabilator torque tube/horn inspections, SB1160 & SB1187.
- 18) Janitrol heater. When was it last overhauled? If longer than 10 years, recommend it be done.

- 19) Side window curtain rods. Are they still installed? If not, possible cracking of plastic window frames because the curtain rods backing to reinforce the plastic window frame.
- 20) Alternators or generators?
- 21) Light weight starters?
- 22) Slick or Bendix mags? Originals were Bendix and would recommend them. Difficult cold weather (5 deg C or less) starts with Slicks. Impulse coupling tends to stick.
- 23) Autopilot - Is a digital navigator connected to an analog A/P and how are they interfaced? Or they interfaced? If there is a mixture of analog and digital avionics, there could be potential interface problems.
- 24) General condition of tires, brakes, landing gear doors (are the main landing gear loose?). Are landing gear doors properly aligned in the up position and that there is no interference between the landing gear, brake hose and the microswitch harness.