

ANNUAL INSPECTION REPORT
Cessna 172L Skyhawk N7100Q
Serial No. 17260400

March 17, 2005

TO:
Pinellas Pilots Assoc.
PO Box 861
Safety Harbor, FL 34695

We are out of the hanger! This has been a comparatively expensive but very thorough annual inspection and repair. Most of you realize that the principal cost is assigned to labor cost, at \$55 per hour this is a big factor. I have personally observed much of the work done by Matt Malouf and his mechanics at CAMS. In my opinion we have paid for quality work which is what we should expect.

I will not describe each item of work done but there are some areas worthy of special comment. These are areas that consumed the most man-hours.

1. Remove head liner. - Apparently this had not been done on any recent annual. This disclosed 2 major problems. A short hose connecting the fuel lines above the pilot's head was split end-to-end and on the verge of complete failure. The upper fuselage skin had never been treated to retard corrosion.
2. Removed Propeller. - The propeller was removed and sent to the prop shop in Tampa where it was balanced statically and re-pitched. The re-pitch allows a 200 rpm real increase in engine rpm at climb power. The result is rated climb power can now be achieved. Matt noted that the prop was previously installed 90 degrees out of phase with the engine firing position. This may account for some of the vibration noted by pilots.
3. Flaps. - The flap motor limit switch was set to prevent jamming and the position indicator adjusted to show correct position of flaps.
4. Instrument Panel. - Extensive work was done in this area. Loose wiring under the panel was tie-wrapped correctly. All vacuum system hoses were replaced with new hose of the proper type. Our DG was removed and sent for repair. The autopilot is placarded inoperative since the loaner DG has no electrical output to autopilot coupler.
5. Engine. - Extensive work was done here as well. A new crankshaft seal was installed. Two crankcase bolts tightened and sealed. These repairs should eliminate the oil leakage which resulted in grounding the airplane. Two engine mounts were replaced with new ones, also a possible cause of

vibrations. Engine and carburetor were adjusted and repaired as necessary. Spark plugs were removed, cleaned, gapped and replaced. There was no indication of impending problems within the cylinders. A new oil filter and 8 quarts of oil were installed. The element from the old filter showed no evidence of metal particles indicating abnormal wear.

Naturally the engine is an area of our greatest concern. If we observe a TBO of 2000 hours we have 461 hours to go. Matt says there is now no reason to expect an early TBO and could legally go 10 percent over or 2200 hours based on health of the engine. CAUTION, while the engine itself is strong the muffler-exhaust system is not. PLEASE review starting procedure note posted earlier on Schedule Master by Dave Hicks. This will help avoid flooded carburetor starts and back fires which will damage this system.

Walt flew the airplane and has emailed this report "CAMS finally got the plane back together today and I took it twice around the pattern despite 15-25 knot winds. The tach has been adjusted so we now get 2400 rpm on TO roll and 2500 during climb out, a big improvement. The altitude encoder is right on the money as well. We have a loaner DG so the autopilot is not usable and is placarded. As far as Ray and I are concerned the plane is ok to fly. He is flying it tomorrow and I have it at various times on Fri, Sat, and Sunday. Walt"

We should continue to monitor oil use. When the engine is cold after starting allow it to warmup at low RPM. The cylinder compression test also indicates a strong engine. The Figures below graph these engine health parameters.

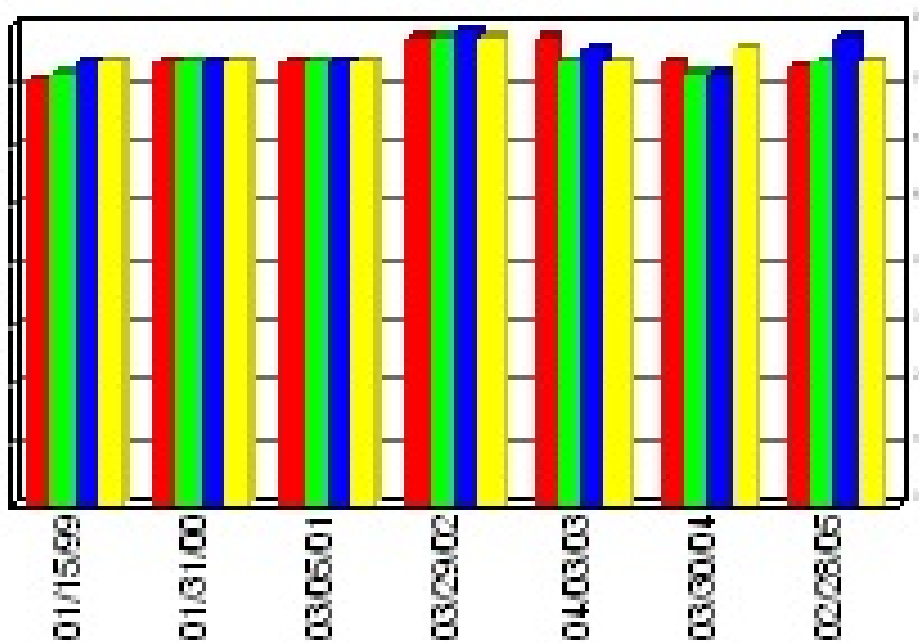
Finally, I hope this rather lengthily report is helpful. Give me your feedback and any questions. CAMS guarantees all work done. Report all problems promptly.

Respectfully,

Ray Forrest

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Cylinder Compression Results



■ ■ ■ ■
Cylinder 1, 2, 3 and 4

Oil Use History

Should Not Exceed 0.5 Qts/Hr.

