



Airframe Maintenance Entry

N2693B

October 29, 2013

Cessna 414A

S/N: 0422

Tach:2084.9

Following annual inspection dated August 6, 2013 the following discrepancies prevented an airworthy release of the aircraft. 1) loose butt splices at right fuel flow transducer. Corrective Action, (C/A), The butt splices were re-crimped. 2) Pilot seat back adjustment inoperative. C/A Adjusted cable and rerouted. 3) Brakes spongy. C/A bled the brakes with Mil-H-5606. 4) Left heat exchanger door will not move. C/A Cleaned cable housing, replaced clamp and re-rigged cable to provide for proper operation. 5) Right hand strobe inoperative. C/A The strobe power assemblies were removed and replaced with Whelen Orion 600 LED units conforming to TSO C96a Class II. This minor alteration (TSO to TSO) resulted in a weight decrease of 5.2 pounds at 163" and a net decrease in the alternator continuous load. 6) R/H throttle cable sticky. C/A adjusted rigging and lubricated cable. 7) L/H oil cap loose. C/A tightened ears on cap. 8) Leak noted at air conditioner hydraulic pump. C/A No evidence of leakage was present. 9) Oil leak at right air pump. C/A No evidence of oil leakage was present. 10) Cabin door lower frame cracked out at aft hinge. C/A The lower door was removed and a new frame PN 5111505-4 was installed. 11) Co-pilot seat belt worn. C/A Replaced the lower section of the shoulder harness with a serviceable section removed from a surplus Cessna belt of the same part number. 12) Baggage door keeps sticking. C/A Removed the keeps, disassembled, straightened, aligned, reassembled and reinstalled. 13) Elevator trim cable fair lead loose under cabin floor. C/A Secured fair lead by tightening screws. 14) Battery failed capacity check. C/A Serviced, charged and installed a new Gill 246 storage battery serial number G02765292. 15) Two nut plates are broken in the inspection panel port outboard of the left landing gear. C/A Installed two new nut plates. 16) Emergency Exit door seal cut and worn. C/A removed plug door and cleaned seal. No cuts were detected. The plug door was reinstalled. 17) Possible corrosion under cabin heater. C/A No corrosion was present only dust accumulations. 18) Heater fuel drain obstructed. C/A Cleaned out drain line. 19) Pilot's left hand brake master cylinder leaking. C/A Found source of fluid to be spillage from hydraulic service ports in nose. 20) Cabin heater outlet hose has hole in it. C/A Installed a new hose part number CM3211-18A4.2. 21) AC hydraulic reservoir cap seal leaking. C/A Installed a new cap seal. 22) Hydraulic line chafing in AC service panel. C/A Adjusted orientation of lines and applied anti-chafe material. 23) Flap limit switch mounting loose. C/A tightened screws. 24) Some corrosion in battery box. C/A Cleaned, treated and repainted with epoxy paint. 25) Buss bar inbd. of right nacelle has surface corrosion. C/A Cleaned and treated. 26) Aileron trim chain jumps sprocket teeth. C/A tensioned trim cables. 27) Emergency Exit door handle cover cracked. C/A Applied clear tape and reinstalled cover. 28) Right aileron hinge bolt has improper safety. C/A Replaced safety wire. 29) Left aileron balance weight attach hardware incorrect. C/A removed aileron, balanced, installed balance weight with correct hardware and reinstalled control. 30) A small crack is present on the right side of the rudder upper hinge area, forward skin. C/A A small .032 2024t3 doubler was nested under the existing skin utilizing the existing rivet pattern plus one rivet. 31) Left elevator has a trailing edge crack four inches outboard of the inboard rib. C/A Trailing Edge Repair 16-41 was applied, the control static balance was confirmed within limits. 32) No static wicks on elevators. C/A installed static wicks on both elevators. 33) The left elevator has cracks in the upper and lower skins. C/A The elevator was painted, balance checked and reinstalled following repair by Sharp Air Services FAA CRS CRS6SPR95B on WO9 dated 9-24-2013. 34) The elevator bellcrank pivot attach bolt missing cotter pin. C/A replaced cotter pin after replacing the pivot bearings with new units. 35) The right aileron has a trailing edge crack. C/A Installed the trailing Edge Repair 16-41. Removed the control and balanced to within static balance limits and reinstalled. 36) Left inboard flap, outboard push rod is rusty. C/A Removed the rod, cleaned, treated and reinstalled. 37) Heater ram air duct has chafed a small hole in the nose lower skin. C/A The hole was drilled out and a blind rivet installed to plug the hole. 38) Elevator trim tab push rod is bent. C/A Realigned the rod. 39) Left elevator torque tube loose. C/A Tightened hardware. 40) Nose steering tow limits placards missing. C/A Reapplied markings. 41) Magnetos squawked due to high time. C/A There is no FAA requirement to overhaul the magnetos.

In addition, the following work was accomplished:

- 1) The horizontal stabilizer was removed to inspect an area of the FS349 bulkhead on the left side. The area was inspected by Aircraft Structural Inspections LLC FAA CRS 1NPR910B under WO 2151 dated 8-21-2013 and a report indicating "no rejectable defects" was issued. Dimensions of

RIGHT SIDE

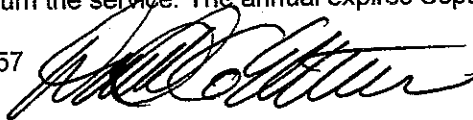
holes in the bulkhead and pictures of the construction of the horizontal stabilizer were sent to Cessna Engineering. Cessna Engineering confirmed that all of the holes were within tolerance and that the stabilizer conformed to the blueprints and had not been modified from original specifications.

- 2) Four surplus holes made at one time to attach carpet to the forward pressure bulkhead were plugged with AD rivets. No holes interfered with either edge distance or hat section vertical members.
- 3) A new CM3211-10B9.5 duct was installed at the left bleed air heat exchanger.
- 4) The aileron, rudder and elevator trim actuators were painted installed and rigged following cleaning and repack by Trace Aviation. The systems were rigged and cables tensioned and turn buckles safetied.
- 5) The areas under both wings exposed to exhaust trail were cleaned and treated for surface corrosion.
- 6) The left main wheel half was disassembled and media blasted with corn media, magnedyned, and painted with primer.
- 7) Cleaned and treated surface corrosion on both prop controls
- 8) Replaced the upper deck lines on both engines with new Mil-H-6000 hose stock.
- 9) Plugged numerous small pin holes in the deice boots.
- 10) Installed two new engine air filters.
- 11) All flight control cables were tensioned.

Work was performed by J Miley, M Brown, R Sheridan, D Entrekin, C Hopper and J Trigg.

This addresses all airworthiness discrepancies from the annual inspection discrepancy report and the aircraft is approved for return the service. The annual expires Sept. 1, 2014.

David C Entrekin A&P 3398557



*NOTE: NEW INDUCTION AIRFILTERS INSTALLED THIS TIME
SEE 10) ABOVE*