

YE 7-21-2014 N255 TTAf 1968.3 Air Hobbs 208.2 Annual and RESTORATION

20 This aircraft was inspected as per Cessna Checklist D2516-9-13 2-25 thru 2-31 as per FAR 43 Appendix D.

DA Airworthiness Directives

1. C/W seat track AD 11-10-09 by inspection of seats and tracks as per G (1-10) and found serviceable after new LH pilot seat rail Cessna part 1514114-1. Inspection due again in 100 hours or 12 months whichever comes first. *04-25-16 R1*
2. Complied with the AD ~~04-25-16 R1~~ Heater fuel regulator shut off valve leak as per (1) and found serviceable. Inspection due again in 100 hours or at the next aircraft annual whichever comes first.
3. Complied with AD84-26-02 by installation of new Donaldson Paper element C294510-701 for the front engine, it will be due for replacement as per AD in 500 hours or an air Hobbs of 708.2.
4. Complied with AD 04-21-05 Combustion tube and air pressure switch by disassembly of the heater unit and inspection, pressure testing with appropriate tool and was determined to be airworthy as per AD (e), (1). This AD is recurring and will be due at 100 hours of heater operation by the heater Hobbs or 24 calendar months which ever comes first.
5. See updated AD list for compliance with old Ads.

Radios, gauges, Electronics and Electrical

6. Removed the existing ELT and installed new ACK 406 E-04 ELT in the same location as the removed ELT as per supplied instruction booklet. New ELT Code 2DC86 A4796 FFBFF. A544 6 volt battery due Jan 2019, CR2 Lithium battery in audio alert due Jan 2024. Install the optional wire forward to the future GPS for improved accuracy. Three calendar month inspections will be required to maintain continued airworthiness see instruction booklet with maintenance records. **ELT TESTED AS PER 30 DAY AND 91.207 D 1-4**
7. Sent penny cap fuel system monitor out to Aero-mach labs for overhaul, we installed and adjusted for accurate fuel readings.
8. Tested the switch lighting panel system and found the C613001-010 transformer failed, installed a used serviceable unit.
9. Install new Plane and Power FAA/PMA approved regulators P/N R1224 S/N 141785 on the rear and 142019 on the front as per Plane and Power installation instructions 12-001 guide "B". Connected the master wire between the two and adjusted the voltage to 28.1 on both regulators which was the voltage recommended by Concorde RG batteries for the temperature at the time set. Installed both sense wires to the master relay circuit breaker side for accurate regulation.
10. Installed all new GE327 bulbs in instrument post lights. Repaired two post light connections by replacing the connectors
11. Installed new battery in the clock.
12. Diode on the Rear alternator isolate circuit had failed, installed new.
13. Replaced front and rear engine starter contactors with new Cessna PN X61-0031 contactors.
14. Replaced master battery contactor with new Cessna PN X61-0029 contactor.
15. Removed the existing RH instrument panel and made new panel of increased thickness material to mount new JPi 960 unit and FM radios.

erations

umber of

o entries.)

Page 2

erations

umber of
c entries.)

16. Replaced the aluminum S-KA7 starter wire with Copper M22759/16-4-9 as per S-1568-4-9 alternate wire in the Cessna drawing.
17. Cabin Altimeter gauge inaccurate, installed new Cessna C6685146-0201.
18. Sent out all pilot gauges and flight instruments to Quality aircraft instruments for overhaul. Reinstalled in the dash and checked operation, all normal.
19. Installed new Whelan Engineering LED PAR 36 landing light 01-0771424-10 PMA approved see supplement 37 dated 12/2/2010, these replace the original headlights.
20. Repaired cracked battery box cover with aluminum and riveted and bonoed with sealant
21. Installed new Concorde Battery RG-24-16 SN 40661803. Tested capacity at new and was found to be 110%
- STCS and Major repairs**
22. **JPI 960** Removed the original Cessna EGTs, Tachometer, MAP, lines and gauge, fuel pressure lines, Engine instrument gauge cluster and lines (includes CHTs, oil temps, oil pressures, and fuel gauges) and outside air temp and all hoses, lines, and wires. Replaced with JPI instruments EDM-960-6 Engine Data Management system in accordance with the installation manual for the EDM 960. Report 909, Revision C dated 12-12-12 and Report #503 Revision B dated 3/14/97 for the fuel flow options and DWG 790835 for the proper wiring of the Penneycap fuel quantity system. All were done as per STC SA00432SE STCSA01828SE and STC00861SE. All instruments were configured to the factory original specifications from the owner's manual for this aircraft. This installation of the 960 with fuel flow option can be used as primary instruments for the turbine inlet temp, EGT, CHT, MAP, RPM, Oil Pressure, Oil Temperature, Amps, Volts, OAT, Fuel Flow, and Fuel Level with the Penneycap system. Calibrated the Penneycap fuel calibration points according to the FAA approved installation manual. We will fine tune the fuel flow K factor according to paragraph 34.1.22.1.1 and fine tune the Horsepower constant as per 34.1.1 during the first flight
23. **Seat Belts STC.** Installed BAS Inc. Inertial Reel Shoulder harness system as per STC SA2067NM and Installation instructions report 1400 Revision D dated November 10/2010.
24. **Seaton Dual MaxDim STC.** Installed Seaton engineering Corp. Dual MaxDim instrument light dimmer to replace the existing Cessna system as per STC SA1800SE and installation Instructions Document 9150-003 Rev A dated 9/23/2009.
25. **Seaton Max Dim STC.** Installed Seaton engineering Corp. MaxDim instrument light dimmer to replace the existing Cessna system as per STC SA1800SE and Document 9150-002 Rev E dated 6/08/2009
26. **Seaton Max pulse landing light system STC.** Installed the Seaton Engineering Corporation 9200-000-A light controller as per STC SA1861SE and document 9150-001 revision G dated 6/22/2009
27. **Brackett Air filter STC.** Installed Brackett Engine Air Filter Assembly BA5810 as per STC SA71GL and instructions document I-194 and instruction sheet 5806 dated 7-27-094 for the rear engine.
28. **Elevator repair.** The elevator had a crack originating from a rivet and extending 1 inch. We elected to replace the entire trailing edge skin 1432010-25 with material of the same type and thickness and match drilled to the old skin. Reinstall the undamaged inner ribs from the old to the new. Complete skin was replaced as per 16-4 of Cessna manual D2516-9-13 and acceptable practices of AC43.13-15/2A section 4-14. See 337 this date.

tions
er of
tries.)

YEA
20
DAT

ations
umber of
entries.)

- 29. Vertical fin repair. The bottom sheet metals of the vertical fins were damaged by the lower sections gently hitting the ground during placement in a hangar with tug. We replaced the 1431000-47 and 1431000 lower vertical fin skins left and right with material of the same type and thickness match drilling holes and riveting to the existing undamaged ribs, bulkheads and stiffeners as per 16-5 of the Cessna Repair Manual D2516-9-13 in the structural area of the manual and AC 43.13-1B/2A. See 337 this date.
- 30. Removed of earlier installed avionics. Removed the entire Cessna 400A autopilot and all of its components and wiring. Removed all the radios, transponder, Loran, DME, wiring, circuit breakers, and their indicators in preparation for new radios.

Heater

- 31. Removed the cabin Heater assembly and disassembled, inspected and reinstalled. Adjusted the unit and tested the operation to be normal. Interior of the unit looked new.
- 32. Replaced inlet tube on Janitrol heater with new 1 1/2 inch Scat 6 tube.
- 33. Installed new Hobbs meter on Janitrol heater to keep tracks of usage.

Landing Gear

- 34. Installed new 18x5.5 tubes in MG tires. Cleaned and repacked wheel bearings using new PN 153-00400 grease seal rings.
- 35. Replaced the gear motor activate solenoid with a new Cessna PNX61-0031 contactor. The old unit was found defective during gear retraction test due to high resistance and low voltage to gear motor.
- 36. Adjusted both rear MG doors as per the manual, previously they were adjusted to tight and were causing stress on the doors and linkage.
- 37. Installed new seal on LH rear MG door PN S1042-1.
- 38. Replaced 3 rivets on LH rear MG door hinge. Replaced rear MG door cylinder hoses with new P/Ns AE2460000E013.50 and AE2460000E014.0 hoses.
- 39. Replaced front MG door cylinder hoses with new P/Ns AE2460000E008.0 and AE2460000E012.0 hoses.
- 40. Replaced both outer MG brake hoses with new P/Ns 350-4-006.875 hoses.
- 41. Rebuilt all three MG door cylinders with new o-rings.
- 42. Rebuilt the cabin entry door assist cylinder with new seals and o-rings and charged with shop air.
- 43. Removed the front wheel shimmy damper and installed all new seals, filled with 5606 oil and reinstalled.
- 44. Installed new gear horn micro switch on the front engine to replace unit with flat roller.
- 45. Serviced the front strut with new oil and air.
- 46. Installed all new rubber seals on the Rear engine cowl and gear doors
- 47. Rebuild both MG brake slave cylinders with new o-rings.
- 48. Resealed the brake master cylinders as per 5-52 and figure 5-13 in the Cessna service manual with all new seals. Install and bleed the brakes using new 5606 oil.
- 49. Cycled the gear both normally and using the emergency process multiple times. Adjusted the brake lines so as not rub the fuselage.

Flight Controls

- 50. Both rudder bushings and control rod ends seized, freed, cleaned and lubed.

--	--	--	--	--

Page #4

gently lower ating to 6-9-13 in erations umber of entries.)			Description of Inspections, Tests, Repairs and Alterations	ions r of ies.)
ponents ors in			51. Had to rig the yoke interconnect cable to get proper travels with the yokes centered. Installed all new McFarlane Flap roller kit 14 and complied with Cessna SEB95-3 Flap Roller support and roller washer inspection. Installed new Flap follow- thru cable and lubed all the pivots so the system would work smoothly as per section 7-18 a-y. Rigged the rudders, ailerons, elevators and flaps as per Cessna manual and appropriate sections. Set cable tensions to the middle of the specs. Set travels to specifications as per the manual.	
nd tested			52. Checked trim rigging and was found in spec. 53. Installed all new Cessna flap buttons on the top skin of the flaps.	
CO grease			Miscellaneous 54. Installed new McFarlane gascolator plunger on front gascolator PN MC0756010-11. Cleaned and installed new o-rings and gaskets in both front and rear gascolator.	
s found			55. Installed new D9-14-5 vacuum filter for both front and rear engine. Replaced both the Vacuum Bypass filters with new RAB3-5-1 elements. Installed all new vacuum hoses.	
ng stress			56. Installed new S1878-1 Cam Loc fastener in RH instrument panel access cover. 57. Replaced 5 rivets on the lower rear doorframe with Cherry Max CR321 3-5-2 rivets.	
as			58. Sonic cleaned the rear engine fuel selector valve installed all new seals, o-rings and reassembled. Tested for leaks and operation and found normal.	
u			59. Installed new Lord engine mounts PN J-9613-31 on both front and rear engines. 60. Replaced front engine throttle cable with three new Cessna PN S1391-9.	
new			61. Replaced all rear engine control cables with new Cessna P/Ns S1391-17. 62. Removed all the fuel tanks on the LH wing and installed new hoses and welded the pinhole leaks in the skins, glued down the insulation strips and replaced the inner most tank with new 1516133-1. Replaced all the fittings with new. Removed the inner most fuel tank in the RH wing and welded small cracks that were seeping fuel. Installed all new hoses on the LH wing and new hoses on the RH 2 inner most tanks. Replaced all of the screws in the wings with new screws using the part #s in the parts manual to get correct.	
es so as			63. Rig the rear cowl flaps as per section 10-3 of the manual so they would open the max amount and close snugly. Replaced both front and rear cowl flap motor clevis pins with new MS20392-1C25 clevis pins. 64. Repair the cracks and thin metal in the rear engine cowls with new material of the same type and thickness rivet and glue in place and install anti-chafe tape to alleviate a recurrence.	
			65. Repaired rear alternator blast tube by fabricating a new mounting tab. 66. Had both electric Fuel boost pumps rebuilt. 67. Installed new plastic spinner supports front and rear with new Cessna parts. 68. Installed new seals in forward fuel gascolator and Plunger (Gascolator Drain) p/n MC0756010-11 Supplied by McFarlane Aviation.	
			69. Installed all new Fiberglass fairings on the wing struts 1571011-1, 1521002-13 by Skeen Aviation Inc. 70. Replaced damaged and broken static wicks with new. 71. Installed all new baffle seals on the front and rear engines. 72. Ordered a decal kit from Moody Aero-graphics and replaced the missing and badly worn decals with new.	

73. Installed new interior plastic: Center console UK1514115-2, Circuit breaker panel 1570242-9, and lower cabin door. Repair all the plastic panels and paint gray with plastic interior paint. Install new panel K1511420-35.
74. Remove all the windows. Polished the side windows and glued back in place to seal leaks. Replaced the front windshield with new Cessna 1513253-1 match drilled the holes and installed all new rubber mounting bushings. Installed all new inner moldings and new inner windows that were clear to replace the old. Replaced both inner door windows with new Great Lakes Aero Products Inc. windows PN W/T-1104 and W/T 1106. Used new seal PN S2171-1.
75. Installed new Great Lakes Aero Products Inc Wing tip lens covers 1520008-5 and lens A1280-2
76. Repainted the complete aircraft with Dupont single stage paint after chemically cleaning and anodizing complete exterior of aircraft. Paint application done by Alan Stippich under my direction. Balanced all the controls Elevator-3.75, Ailerons RH +1.9 LH +1.0, LH Rudder 4.608 RH rudder 4.400
77. Installed complete FAA/PMA Airtex interior, seats, carpet and sidewalls. Base DL2-2 Iron, Trim DT-346-A Smoke, Vinyl DT-346-A Smoke, Carpet, Flint, pattern 136.

A&P Daryl Johnson, Kevin Lamp and MIT Phillip Negaard assisted with maintenance.

I certify that this aircraft has been inspected in accordance with a 100 HR/ Annual inspection and was determined to be in airworthy condition. M David Parker [redacted] A&P/IA [signature]

itions

ber of
tries.

7-28-14	Test Fly aircraft after major Rebuild and found all systems normal.	as per [redacted] [redacted] com pilot
---------	---	--

04/26/2018 N255 Air Hobbs landing light.

- 1 Removed failing Whelen LED RH landing light.
 - 2 Installed new FAA/PMA Aero Leds p/n 01-103-H-A (Sunspot 36HX landing), IAW supplied installation guide. No weigh and balance change, this is a minor alteration.
- Daryl Johnson [redacted] A&P [redacted]

04/27/2018 N255 Air Hobbs 979.6 Compass card
Renewed faded compass card numbers. Compass card reads as follows:

Compass deviation	FOR	N	30	60	E	120	150	S	210	240	W	300	330
With radios on	STEER	357	29	59	88	120	151	181	210	238	271	299	332

Daryl Johnson [redacted] A&P [redacted]

5-11-2018

N255 TTAF 2740.6 Air Hobbs 980.5 Propeller balance

Both propellers/engine balance was check and or balanced as necessary. See respective log books.

Daryl Johnson [redacted] A&P [redacted]

7-9-2018 N255 TTAF 2755.4 Air Hobbs 995.3 Annual

This aircraft was inspected as per Cessna checklist as per FAR 43 Appendix D.

1. C/W seat track AD 11-10-09 by inspection of seats and tracks as per G (1-10) and found serviceable. Inspection due again in 100 hours or 12 months whichever comes first.
2. Complied with the AD 04-25-16R1 heater fuel regulator shut off valve leak as per (1) and found serviceable. Inspection due again in 100 hours or at the next aircraft annual whichever comes first.
3. Complied with the AD04-21-05 Combustion Tube/Switch as per (e) (1) the heater passed the decay test but the switch was found to have leaks. Installed new switch 94E42-3 as per part (3) of the AD. This is terminating action for the switch operational tests but testing the combustion chamber is still required at 100 hours of use or every 24 calendar months as per the Ad section (e), (1), (iii).
4. Tested the ELT as per 91-207 D, 1-4 and the continued airworthiness instructions sections 9 and 10 of the manual for the 406 ELT and was found serviceable.
5. Weighed the fire extinguisher and found serviceable at 39.2 ounces. In Manufactures spec of original weight (39.75) without loss of 2 ounces.
6. Complied with other continued airworthiness items included in the aircraft records.
7. Tested the main aircraft battery as per Concorde ICA instructions 24-30-71 and was found to be at 93% Battery will need to be tested again in 12 months as per instructions.
8. Installed new RAB3-5-1 vacuum relief filters both front and rear.

Page #1

9. Lube exhausts waste gates on both engines.

10. Inspected the turbo exhaust clamps for cracks as per manufactures recommendations and found none.

11. Operated the gear through an emergency operation and multiple gear operations and found to be normal. Operation was 11.5 seconds up and 10.7 seconds down with 24 volts. Service the hydraulic power pack with oil

I certify that this aircraft has been inspected in accordance with an Annual inspection and was determined to be in airworthy condition.

M David Parker A&P/IA

Annual

Page # 2

ations
er of
tries.)

7/13/2018 N255 Air Hobbs 995.3 Brake discs, linings

Installed new Rapco brake disc p/n RA164-02707 and Rapco brake linings p/n RA66-22 on both R&LH main landing gear. Balanced both R&LH wheel/brake assemblies. Cleaned, inspected and packed all MLG wheel bearings. Installed new felt seals p/n 154-00300 and p/n 15401300 on both MLG and new p/n 153-01500 and p/n 153-00300 seal rings on LHM only.

Daryl Johnson A&P

8-6-2018 N255 Air Hobbs 1074.5 DG replacement

Existing DG 4000D-1 S/N 29794E precessing. Removed from the aircraft and replaced with Overhauled unit from Aircraft Quality Instruments 502A S/N 60785F W/O 62121 8130-3 from dated April 11, 2018. Unit was installed and tested for proper operation and found serviceable. Work assisted by A&P Daryl Johnson. M David Parker A&P