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The Engine Specialist
FOR CESSNA, BEECHCRAFT, & CIRRUS AIRCRAFT



AIRFRAME MAINTENANCE RECORDS



Registration No. N 904US

Serial No. LJ - 856

Dates: 1-26-2017 —



AIRFRAME MAINTENANCE RECORDS

Log No. _____

Aircraft Registration No. N904US

Model C-90

Serial No. LJ-856

Waco Regional Airport • P.O. Box 5219 • Waco, Texas 76708
Phone: (254) 752-8381 Fax: 254-752-3307
www.ramaircraft.com

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATION NO. OF PERSON PERFORMING WORK
				TOTALS brought forward from previous page

**AIRCRAFT LOGBOOK ENTRY**

DATE: 01/26/2017

REG. NO: N904US

MODEL: C 90

SERIAL NO: LJ-856

ACTT: 7047.3

Log Entry

9487.3 TT

Removed nose retract actuator PN: 50-820208-5, SN: ALG-12120 and installed an over hauled actuator PN: 50-820208-5, SN: ALG-10720. Rigged landing gear per KA 90 Series M/M 32-30-17. Lubricated nose actuator non sealed bearings. Completed 5 fault free cycles and functional checked satisfactory.

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8285 Perimeter Road
SEATTLE, WA. 98108

Allen McGregor
Allen McGregor
AP2181249

**AIRCRAFT LOGBOOK ENTRY**

DATE: 04/12/2017

REG. NO: N904US

MODEL: C-90

SERIAL NO: LJ-856

ACTT: 9500.2

CYS: 9820

Log Entry

7060.2 HM

Complied with a Wing Bolt inspection per Beechcraft SIRM Manual 90-39006, Rev C11, Chapter 57-13-01, Chart 501 items 1-10. NDI was accomplished by ACUREN Inspection, Everett WA. 98204. Aviadesign Inc Spar Reinforcement was removed for inspection and reinstalled per ICA, EO-B-8001. The reinforcement was inspected and is serviceable for continued service. New PLI washers PN: 61475-14-45.5 were installed on both LF bolt assemblies. New washers PN: 90-110032-1 and MS20002-10 were installed on lower aft bolts. Complied with 12 month spar cap inspection. All wing bolts and nuts due retorque at next inspection event.

SIRM chart 501, item 11 is due at 10,000 ACTT.

Complied with FAA AD 89-25-10 during SIRM inspection.

Main battery PN: RG-380E/60K, SN: 40553062 was removed for a capacity check and a new battery PN: RG-380E/60K SN: 40843771 was installed.

Complied with 12 month inspection and test of cabin altitude warning switch per KA 90 Series M/M chapter 21-30-11, method #3. Checked satisfactory.

Complied with 12 month inspection of pilot and co-pilots edge lit panels.

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AIRCRAFT LOGBOOK ENTRY

DATE: 08/17/2017

N904US BEECH C90 S/N: LJ-0856 HOBBS: 7073.4 ACTT: 9513.4 LDGS: 9827

DRK

- Complied with Phase 1 Inspection in accordance with Beech C90 Series Maintenance Manual Chapter 5-21-00.
- Reattached air ducts to left forward cabin air wemac and right center cabin air wemac nozzle. Ops checked all air vents in cabin good.
- Installed new left and right wing fuel filler placards P/N 50-921606-5.
- Reinstalled right flap outboard aft bearing IAW C90 AMM chapter 27-50-01.
- Serviced shimmy damper IAW 90 Series AMM chapter 32-20-11.
- Resealed and serviced cabin door snubber IAW C90 AMM chapter 52-10-01.
- Installed new cabin door inspection lamp P/N 1864. Ops checked cabin door inspection light good.
- Cleaned up light socket and ops checked center step light on cabin door good.
- Installed new cannon plug connector P/N MS3108R12S3S for RH prop tach generator. Ops checked right prop tachometer good.

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Emmett Esmond
AP3155315



Reg. # N904US
Make: Beech
Hours: 7083.4

Date: 8/7/18
Model: C90

Customer: DM Aircraft
S/N: LJ-0856

9523.4 TT

The altimeter system & altitude reporting equipment tests & inspections required by paragraph (a.1), Title 14 CFR Part 91.411 have been performed & found to comply with Appendix E, Title 14 CFR Part 43.

Pilot Airdata:	P/N: 011-00882-10	S/N: 20608905	tested to: 30,000 ft, date cert: 8/7/18.
C/P Altimeter:	P/N: 5934PA-3	S/N: 405192	tested to: 30,000 ft, date cert: 8/7/18.
Standby Altimeter:	P/N: 5934PA-3	S/N: 478647	tested to: 30,000 ft, date cert: 8/7/18.

The ATC transponder's tests and inspection required by paragraph (a.) Title 14 CFR Part 91.413 have been performed and found to comply with Appendix F, Title 14 CFR Part 43 and paragraph (c) Appendix E, Title 14 CFR Part 43 and is approved for return to service.

The above described repair or maintenance is approved for return to service. A detailed record is on file under work order # 642LA.

Signed

Larry Gray

DUNCAN
Q1 1012

Larry Gray
For Duncan Aviation CRS# JG7R076J Phone: 206-764-3962

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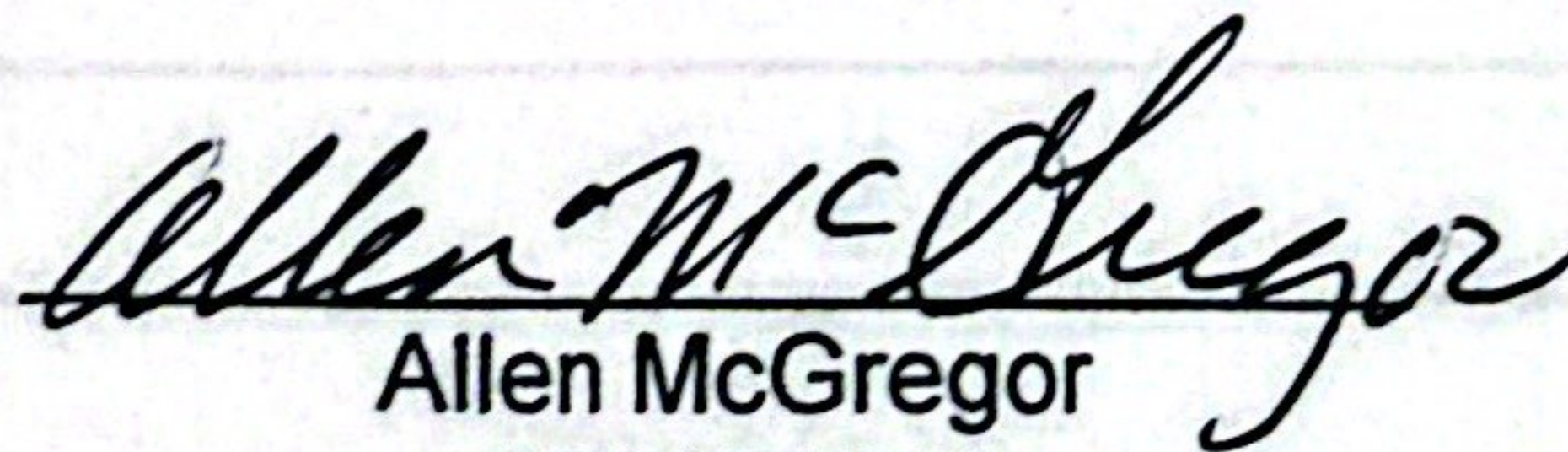
AIRCRAFT LOGBOOK ENTRY
DATE: 09/10/2018

9523.4

N904US BEECH C90 S/N: LJ-0856 HOBBS: 7083.4 ACTT: 9513.4 LDGS: 9827

- Removed and reinstalled Saunders Spar Strap per Aviadesign Inc instructions EO B-8001 for other maintenance. Complied with a Structural Inspection and Repair on wing per SIRM Manual 98-39006 R11, Chapter 57-13-00. NDI was accomplished by ACUREN Inspection, Everett WA, FAA No, JI6R640N. Removed all eight wing bolts and nuts and installed eight new bolts and nuts (15 years) All wing bolts due recheck at next inspection event.
- Removed all three landing gear struts and drag braces for inspection. Disassembled right and left main gear strut assemblies, cleaned and inspected all components per Beechcraft CMM 32-10-00. All components are serviceable for return to service. Replaced restrictor assembly compression ring PN: 101-388025-0001 on both main struts with new. Reassembled struts with new seals, packings and felt pads. Reassembled nose gear drag brace assembly. Disassembled nose strut assembly, cleaned and inspected all components per Beechcraft CMM 32-20-00. All components are serviceable for continued service. Reassembled nose strut with new seals, packings and felt pad. Disassembled right and left main gear drag braces for inspection per CMM 32-10-00. Cleaned and inspected all components. All components are serviceable for continued service. Disassembled nose drag brace assembly per CMM 32-20-00, cleaned inspected all components and all are serviceable for return to service. Reinstalled all removed components in aircraft, rigged and functional checked per Chapter 32-10-03,
- Complied with nose gear retract actuator lube and end play inspection per Beech C-90 M/M Chapter 32-50-07 and 32-30-11. Lubed actuator with 33MS lube. End play was 0.012". Reinstalled and functional checked satisfactory.
- Complied with inspection of nose and main gear trunnion and drag brace mount holes and found all holes within limits.
- Removed right and left main gear actuators for 6-year calendar replacement. Installed overhauled units (RH) 50-510164-18, SN: 100, (LH) 50-510164-17, SN: 100410. Rigged and functional checked per C -90 M/M 32-30-17. Checked satisfactory.

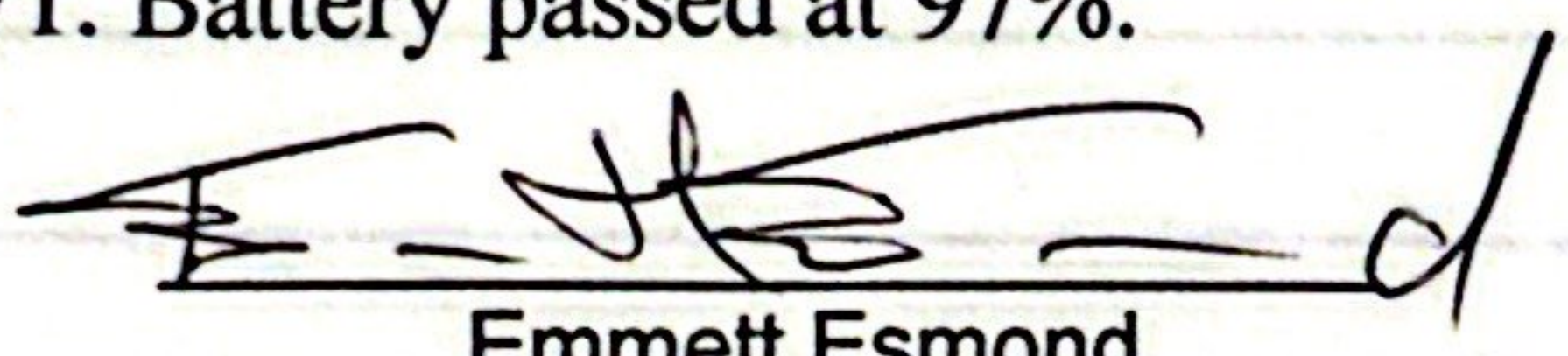
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Allen McGregor
AP2181249

N904US BEECH C90 S/N: LJ-0856 HOBBS: 7083.4 ACTT: *9523.4* LDGS: *9828*²⁷

- Complied with Phase 2, 3, and 4 Inspections in accordance with Beechcraft C90 Series Maintenance Manual.
- Inspected and tested ELT IAW FAR 91.207 (d).
- Complied with 12 month outboard upper and lower main spar cap inspection.
- Complied with 30 month nacelle fuel cell and probe inspection.
- Removed oxygen bottle for 5 year hydrostatic test and regulator overhaul. Installed overhauled oxygen bottle & regulator assemble P/N 801293-04 S/N 14102V/2732. Serviced, ops and leak checked oxygen system good.
- Complied with 12 month Cabin Altitude Warning switch test and inspection.
- Complied with pilot's fuel control edge lit panel, lower edge lit panels, copilots circuit breaker edge lit panel and wiring below storm windows inspections.
- Complied with 5 year/1200 hour lube on rudder trim actuator.
- Complied with 200 hour lubes per Chapter 12.
- Complied with 5 year replacement of Beech installed engine hoses on left and right engines. Engine oil changed on left and right engines.
- Performed capacity check and service IAW Concord Battery Corp CMM for RG Series Main Aircraft Battery Chapter 24-30-71. Battery passed at 97%.

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 Emmett Esmond
 AP3155315

 7777 NE Airport Way
 Portland, Oregon 97218
 FAA CRS#: FCPR831D

FLIGHTCRAFT

Log Entry Type:	<u>Airframe</u>	Reg#:	<u>N904US</u>	Model:	<u>Beechcraft C-90</u>	S/N:	<u>LJ-856</u>
TTAF:	<u>9535.9</u>	HM:	<u>7095.9</u>	Cycles:	<u>9848</u>		

Complied with the following Inspections:

Sqk	Work Performed
1.1	Complied with Inspection of L/H Nacelle Fuel Cell and Probe for microbiological sludge build-up IAW Beechcraft C-90 Series AMM Ch. 05-21-01-601 and 28-41-01-601. No defects noted.
1.2	Complied with Inspection of R/H Nacelle Fuel Cell and Probe for microbiological sludge build-up IAW Beechcraft C-90 Series AMM Ch. 05-21-01-601 and 28-41-01-601. No defects noted.
2.1	Removed landing gear actuators to comply with 1000 cycle/30-month total end play check. Inspection of aircraft records revealed that these inspections are not due at this time. L/H and R/H actuators were overhauled 09/10/2018 @ 9513.4 TTAF and 9827 Cycles. Inspection of aircraft records revealed the NLG actuator was also removed, inspected, lubricated and re-installed @ <i>9523.4</i> TTAF and 9827 Cycles. Re-installed landing gear actuators in aircraft. Inspected rigging of down lock springs and performed several gear extension and retractions IAW Beechcraft C-90 Series AMM Ch. 32-30-09 and 32-30-17. Operation checks good.
2.2	Complied with 1000 cycle/30-month Lubrication of retract chain idler sprockets IAW Beechcraft C-90 Series AMM Ch. 12-20-11-301. No defects noted.
2.3	Complied with 1000 cycle/30-month Lubrication of L/H, R/H and Nose landing gear actuator support bearings IAW Beechcraft C-90 Series AMM Ch. 12-20-11-301. No defects noted.

This certifies that the Inspections and Maintenance described above was performed in accordance with the Inspections and Procedures of the Beechcraft C-90 Scheduled Inspection Program and this aircraft was determined to be in an airworthy condition with respect to the work performed. Refer to W.O.# PDX-19-8597 for details. END.

Flightcraft Portland CRS#FCPR831D

Date: 07/10/2019

James Vargo

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FAA CRS#: FCPR831D

FLIGHTCRAFT

Log Entry Type: Airframe Reg#: N904US Model: Beechcraft C-90 S/N: LJ-856
TTAF: 9537.4 HM: 7097.4 Cycles: 9849

Complied with the following inspections:

Sqk Work Performed:

- 1.1 Complied with Phase I Inspection IAW Beechcraft C-90 AMM Ch. 05-25-01-601 Scheduled Inspection Program.
- 1.2 Complied with 1-year recurring visual inspection of wing panels, upper and lower main spar caps for cracks and corrosion on L/H and R/H wings IAW Beechcraft C-90 AMM Ch. 05-21-05-601 Scheduled Inspection Program (Special) and Beechcraft C-90 series S.I.R.M. Ch. 57-13-01-2 Chart 201 Index # 9. No defects noted. This inspection only includes the visible portions of the L/H and R/H Spar Caps and does not include the areas that are not visible due to the installation of the Avia-Design spar strap STC SA1583CE. In accordance with Avia-Design Engineering Order EO-B-8001 Issue 3 dated 30 May 1985, Section 1 "Aircraft Maintenance," Inspections of the wing outboard spar caps no longer apply in the area where the doublers cover the lower spar caps of the outer wing panels.
- 1.3 Complied with 12-month visual inspection of Pilots Fuel Control Panel and Lower Edgelighted Panel, Copilot's Edgelighted Circuit Breaker Panel, and Wiring Circuitry Below the Storm Windows IAW Beechcraft C-90 AMM Ch. 05-21-05-601 Scheduled Inspection Program. (Special). Replaced 9ea. P/N: D158-100-5TI bulbs IAW Beechcraft C-90 AMM Ch. 33-10-01-001. Operation checks good.
- 1.4 Complied with 12-month operational check of the Cabin Altitude Warning Pressure Switch IAW Beechcraft C90 AMM. Ch. 05-21-05-601 Scheduled Inspection Program (Special). No defects noted.
- 1.5 Complied with 6-month Capacity Test of Concorde lead acid battery IAW Concorde battery CMM 5-0171 Rev Q dated 12/04/2018. P/N: RG-380E S/N: 40843771. Battery failed first Capacity Test. Performed 16-hour conditioning charge and battery passed subsequent Capacity Test at 100%.
- 1.7 Complied with 2,000-hour / 5-year inspection of edgelighted panel assemblies IAW Beechcraft C-90 AMM Ch. 05-21-05-601 - Scheduled Inspection Program (Special). Removed and replaced several bulbs as required P/N: D158-100-5TI IAW Beechcraft C-90 AMM Ch. 33-10-01-001. Operation checks good.
- 1.8 Complied with 12-month / 200-hour Raisbeck Dual Aft Body Strake System, Instructions for Continued Airworthiness IAW Riasbeck CMM 85-120 Rev AJ Ch. 05-20-00-03. No defects noted.

Complied with the following Maintenance:

Sqk Work Performed:

- 2.1 Complied with 200-hour lubrication items IAW Beechcraft C-90 AMM Ch. 12-20-11-301.
- 2.2 Wing bolt re-torque due. (New bolts and nuts were installed 09/10/2018). Complied with wing bolt re-torque IAW Beechcraft C-90 Series SIRM Ch. 57-13-01-2. No defects noted.
- 2.3 Inspection revealed substantial corrosion on aft pressure bulkhead frame member. Further inspection found corrosion beyond blending limits and extending into in-accessible areas. Removed and replaced aft bulkhead lower frame segment P/N: 50-440041-195, L/H and R/H splices P/N's: 50-440041-115 and 50-440041-117 IAW Beechcraft C-90 Series Structural Inspection and Repair Manual Ch 20-50-00, 20-50-02, 20-10-01, 20-10-01, 20-06-00, 27-00-01, 27-20-05, 27-20-13, 27-00-01 27-30-07. Sealed and primed with epoxy primer as required.
- 2.4 Volt/Ammeter for right engine does not read accurately. Removed defective Electronics International Volt/Ammeter P/N Off: VA-1-250 S/N Off: 6257. Installed new superseded Electronics International Volt/Ammeter P/N On: VA-1A-250 S/N On: 240410 IAW ECI Operating and Installation Instructions OI 041032 and II 040934 Rev C dated 02/24/1992. Operation checks good. This unit is the available direct replacement for the previous unit installed under STC SA2693NM.
- 2.5 Engines Are Out of Rig. Noted R/H throttle is difficult to operate, R/H engine over speeds in reverse and fluctuates at cruise power. Adjusted R/H reversing cable to eliminate stiffness. Swapped L/H and R/H propeller governors for troubleshooting, new positions: L/H P/N: 8210-002AE S/N: 1580194 R/H P/N: 8210-002 S/N: 1483730AC. Performed power assurance run of both engines. Adjusted rod ends for both propeller governor controls. Adjusted input angle for R/H fuel cut-off arm at FCU. Adjusted contact point for L/H reverse fuel input at FCU. Adjusted length of both fuel governor interconnect rods. Inspected all control linkages for both engines. Subsequent power assurance run, and low pitch torque checks good IAW Beechcraft C-90 AMM Ch. 76-14-05-501 and Pratt & Whitney PT6A-21 EMM Ch. 61-20-00 and 71-00-00.
- 2.6 Propeller is out of balance. Removed one weight on L/H and R/H propellers. Refer to item 6.3 and 7.3 for completion of propeller balance.
- 2.7 Throttle lever catch gates are uneven. Inspection revealed no wear noted IAW Beechcraft C-90 AMM Ch. 76-19-03-601. Refer to Item 2.5 for resolution.
- 2.8 Several Sub Panel Backlights out. Removed sub panels. Replaced bulbs P/N: D158-100-5 as required and re-installed sub panels IAW Beechcraft C-90 AMM Ch. 33-10-03. Operation checks good.
- 2.9 L/H rudder centering spring has worn grooves in the bracket and catches when actuated. Removed and replaced L/H rudder centering spring P/N On: 50-524481-7 IAW Beechcraft C-90 AMM Ch. 27-20-03-501. Rudder deflections: 9.7inches RH @ 46lbs and 7.25 inches LH @ 37lbs from vertical stabilizer centerline.
- 2.10 Nose Steering Stop is bent showing evidence of over travel. Removed and replaced damaged NLG steering stop with new steering stop P/N On: 50-820240 IAW Beechcraft C-90 AMM Ch. 32-20-00.
- 2.11 NLG doors have excessive play. Removed and replaced the following parts with new parts. Bracket P/N: 50-410012-859, bushings, P/N: 105740X-ZPO385, bolt AN5-11/M/ and bushings P/N: A638-1 IAW Beechcraft C-90 AMM Ch. 32-20-05. Operation checks good on gear retractions.
- 2.12 Left Aileron outboard static wick failed testing. Removed and replaced static wick with new static wick P/N On: 35-5010-3. Resistance check is good. Base: .0005 Ohms, Wick: .0003 Ohms IAW Beechcraft C-90 AMM Ch. 23-60-00-601.
- 2.13 Fuse block on right wing corroded. Disassembled fuse block to facilitate corrosion removal. Cleaned all three fuse blocks and connectors. Removed fuses and cleaned contact surfaces. Removed corrosion from aluminum in the area and applied primer as required. Re-installed fuses and re-assembled and re-installed fuse block. Work performed IAW Beechcraft C-90 SPM Ch 20-03-00 and 20-09-00. Operation checks good
- 2.14 R/H Inboard tank fuel cell leaking. Removed and replaced fuel transfer pump gaskets 2ea. P/N: FCB-25722 and 12ea. MS20073-09-05 bolts. Resealed pump "T" fitting and drain valve and reinstalled IAW Beechcraft C-90 AMM Ch. 28-20-01. Reserviced with fuel. Operation and leak check good.
- 2.15 R/H MLG outboard door drags on strut during retraction. Removed and replaced R/H outboard gear door clevis turnbuckle P/N: 50-810143-6

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FAA CRS#: FCPR831D

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- and turnbuckle eye P/N: 90-810064-1 IAW Beechcraft C-90 AMM Ch. 32-20-05-501. Performed gear extension and retraction check IAW Beechcraft C-90 AMM Ch. 32-20-05-501. Operation checks good.
- 2.16 #1 inverter will not power up. Gained access to fuse. Removed failed fuse with new P/N On: FIL40 fuse IAW Beechcraft C-90 WDM Ch. 24-54-01. Operation checks good.
- 2.18 L/H MLG doors have excessive play. Removed and replaced bushings P/N: 50-810131-3 and 50-810145-3 with new bushings IAW Beechcraft C-90 AMM Ch. 32-10-00-05. Operation checks good on gear retractions IAW Beechcraft C-90 AMM Ch. 32-20-05-501.

This certifies that the Inspections and Maintenance described above and detailed in W.O. # PDX-19-8750 were performed in accordance with Beechcraft King Air 90 series Scheduled Inspection Program as required by FAR Part 91.409 (f) (3). Aircraft is determined to be in airworthy condition with respect to the work performed. END.

Flightcraft Portland CRS#FCPR831D

Date: 12/03/2019

James Vargo



**DUNCAN
AVIATION**

N904US

King Air C90
LJ-856

December 3, 2019

Aircraft TT: 9537.4

Aircraft Cycles: 9849

Complied with 12 month ELT functional test and inspection IAW FAR part 91.207(d) with no faults found. ELT ops check good. ME406 P/N 453-6603 S/N 242-03768. 15 digit hex ID: ADCC403AE0003C9. Battery P/N 452-6499 S/N 367484-060 Expires DEC/2021.

Complied with Garmin Service Bulletin No.: 1937 Rev. A, G600 GDU 620 software upgrade to version 7.37. GRS 77 AHRS was upgraded to version 3.06, GDC 74 ADC was upgraded to Version 3.11. GDL 69 was disabled and circuit breaker pulled and collared. Work performed IAW Garmin GDU 620 Installation Manual.

Installed new customer supplied RH Volt/ammeter cannon plug into existing aircraft wiring. Work performed per STC SA2693NM and IAW Electronics International Inc. (VA-1A, VA-1A-XX&RSVA-3) Operating and Installation Instructions.

The above described repair or maintenance is approved for return to service. I certify that this aircraft/appliance has been inspected in accordance with FAR Part 91.207 and was determined to be in airworthy condition. Pertinent details of this repair/maintenance and inspection are on file at this repair station under Work Order #71EDA

Signed

DUNCAN
012344

For Duncan Aviation CRS # JQ04194F Phone: 503-287-7777

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