

From: [REDACTED]
To: [REDACTED]
Subject: [REDACTED]
Date: [REDACTED]

[Fabian Salazar](#)
Re: WPR24FAZ00, Request for Documents
Friday, June 21, 2024 6:13:42 PM

[CAUTION] This email originated from outside of the organization. Do not click any links or open attachments unless you recognize the sender and know the content is safe.

6-4-2024 N323TT Robinson Helicopter R44 Raven II ship serial number 14626
Hobbs 60.0 Aircraft TT 60.0 Aircraft TSOH new
Lycoming engine model IO-540-AE1A5 engine serial number L-38270-48E
Engine TT 60.0

Completed a 100hr/Annual Inspection in accordance with the Lycoming Operators Manual document number 60297-10, 4th edition revised March 2009, section 4-1 thru 4-4, and in accordance with the scope and detail of CFR Title 14, Chapter I, Subchapter C, Part 43, Appendix D-as applicable to this aircraft, engine inspections.

Checked the compression in accordance with Lycoming Service Instruction SI-1191 parts I thru 3, no defects noted, all cylinders nearly equal. Cylinder compression: cylinder number 1, 79/80; cylinder number 3, 78/80; cylinder number 5, 79/80; cylinder number 2, 79/80; cylinder number 4, 79/80; cylinder number 6, 79/80. Complied with Lycoming Service Bulletin SB480 engine oil change, changed oil in accordance with part I thru 10, detailed instructions for oil changes, and part II, visual inspection of screen and filters for contamination. Preformed the oil filter inspection in accordance with parts 1-5, no defects noted. Serviced oil system with Aeroshell 100W plus oil. Replaced oil filter, installed new Tempest part number AA48112-1 filter, Robinson part number B123-2. Replaced the oil filter neck seal part number 72059, in accordance with the Lycoming Operators Manual section 5, 4th edition 60297-10 dated June 2006 part 4. Cleaned Fuel screens and filters in accordance with the Robinson Maintenance Manual section 12 part 12.500, Gascolator assembly, and in accordance with the Lycoming Manual document number 60297-10, 8th edition, dated March 2009, section 4-1 thru 4-4. Replaced air filter, Robinson part number C771-2. Cleaned, gapped, and rotated the sparkplugs in accordance with the Champion Instructions for Continued Airworthiness document number AV6-R, Aviation Service Manual section 13-18 thru 18-0. Reinstalled 12 each of the Champion REM38E sparkplugs. Complied with the magneto inspection in accordance with TCM Service Bulletin SB643 per Part I, 100hr Inspection. Installed new left EIS fixed timing module part number 66K6D35N-01, serial number 6D-3223028 in accordance with in accordance with Lycoming Service Instruction No. 1569B, section IV thru VII, revision dated April 21st, 2021. See Lycoming Engines form 8130-3, work order number 186535/5973667, dated November 15th, 2023 for details and reference Robinson Helicopter sales order number 382298-01 dated May 24th, 2024 for trace ability. Inspected right magneto part number 10-600616-201 serial number E23AA040 in accordance with part C, 1 thru 5. Right Magneto inspection has been complied with in accordance with the Teledyne Continental Motors Service Support Manual, publication X42002-3, revision dated August 2011, Section 6-2.3, detailed breaker compartment visual inspection, 100hr Inspection. Tested in accordance with the Lycoming Operators Manual document no. 60297-10, 4th edition, dated June 2006 section 5, 1(b) Bendix magnetos and in accordance with the TCM System Support Manual section 3.2, testing and troubleshooting. Installed right magneto and the Left Fixed Timing Module using 4 each new base gaskets part number 62224 and 4 each new magneto drive cushions, part number LW13641. Set right magneto to 20 degrees BTC in accordance with the Lycoming Operators Manual document no. 60297-10, 4th edition, dated June 2006 section 5, 1(b) Bendix magnetos. Set left EIS Fixed Timing Module to TDC in accordance with Lycoming Service Instruction No. 1569B, revision dated April 21st, 2021. Magnetos post installation inspection was accomplished in accordance with the Teledyne Continental Motors Service Support Manual publication X42002-3, revision dated August 2011, Section 6-2.3 100hr Inspections, no defects noted. Complied with Service Bulletin SB653 hot magneto test per part 1 per pages 1-3-no defects noted. Complied with RHC Service Letter SL-88, Lycoming Electronic Ignition System (EIS) reduced service life, in accordance with parts 1 and 2. Replaced the EIS module in accordance with Lycoming Service Bulletin SB-656. Installed new Lycoming EIS Module left hand Retard. See Robinson Helicopter Sales Order number 382298-01 dated May 24th, 2024 for part details and traceability. Complied with Lycoming Service Instruction SI 1080 items requiring special attention, in accordance with pages 1 thru 3, no defect noted. Complied with AD 84-26-02 paper air filters-installed new air filter, C771-2. Inspected exhaust system in accordance with the Robinson Helicopter Company Maintenance Manual RTR 460 volume 1, Instructions for Continued Airworthiness section 6 part 6.520 and section 2.410, part 15, revision 13 dated October 2006, visual inspection, no defects noted. Installed 6 each new exhaust gaskets part number 77611, in accordance with section 3-3. Inspected the alternator brush set part number AL-E-2013AC in accordance with the Kelly Aerospace Instructions for Continued Airworthiness, Brush Service Instructions, as a guide. Complied with Lycoming Service Letter SL-1129 alternator belt adjustment per part 2, A 1-2, no defects noted. Checked and adjusted the alternator belt tension in accordance with Lycoming Service Instruction SI 1129 part 3 1-2, no defects noted. Set idle speed and mixture in accordance with section 5-2, part e, 1 thru 4. Complied with Lycoming Service Bulletin SB342 fuel injector lines and clamps per parts 1 thru 5, no defects noted. Complied with AD 2015-19-07 engine fuel injected lines per paragraph (c) (1)(ii), visual inspection, no defects noted. AD 2015-19-07 next due at 160.0 or 6-4-2025, I certify that this engine has been inspected in accordance with 100hr/Annual Inspection and was found to be in an airworthy condition on this date. Helicopters Northwest Technical Services, Inc. [REDACTED] President, AI [REDACTED]



6-4-2024 N323TT Robinson Helicopter R44 Raven II ship serial number 14626
Hobbs 60.0 Aircraft TT 60.0 Aircraft TSOH new
Lycoming engine model IO-540-AE1A5 engine serial number L-38270-48E
Engine TT 60.0

Completed a 100hr/Annual Inspection in accordance with the Robinson Maintenance Manual and Instructions for Continued Airworthiness RTR 460 Volume I, revision 14 section 2.200, revision dated July 2021 and in accordance with the scope and detail of CFR Title 14, Chapter I, Subchapter C, Part 43, Appendix D-as applicable to this aircraft, Inspections.
Drained and serviced the tail rotor gearbox with A257-22 oil in accordance with the Robinson Maintenance Manual Section 1.130. Drained and serviced the main rotor gearbox with A257-22 gear oil in accordance with section 1.120. Cleaned the chip detectors in accordance with section 1.115. Drained and serviced the hydraulic system with A257-15 hydraulic fluid in accordance with section 1.170. Replaced the AN6235-1A hydraulic filter. Replaced the filter base o-ring part number MS28775-14. Drained and serviced the Clutch assembly in accordance with the Robinson Maintenance Manual section 7.210. Inspected fluid drained in accordance with section 7.210, no defects noted. Re-greased lower sheave bearings with Mobile 28 grease. Removed and reinstalled the aircraft ship battery, Mid-Consentient part number TB-17, Robinson part number D237-4 serial number M22-10691 in accordance with Mid-Consentient Aircraft Battery support guide manual section 1.3.2, Revision 4, dated May 15th, 2023. Inspected the aircraft battery in accordance with the Mid-Consentient Aircraft Battery support guide manual, Revision 4, dated May 15th, 2023-no defects noted. Complied with RHC Service Letter SL-64 Fire Extinguisher Maintenance and Handling in accordance with parts 1-3, no defects noted. Inspected the Right-Out extinguisher part number B381-1 in accordance with the Monthly Maintenance Instructions-no defects noted. Complied with RHC Service Letter SL-83 cleaning of the C143 engine RPM Sensor as required in accordance with parts 1 thru 7. Complied with RHC Service Letter SL-88, Lycoming Electronic Ignition System (EIS) reduced service life, in accordance with parts 1 and 2. Replaced the EIS module in accordance with Lycoming Service Bulletin SB-656. Installed new Lycoming EIS Module left hand Retard. See Robinson Helicopter Sales Order number 382298-01 dated May 24th, 2024 for part details and traceability. RHC Service Bulletin SB-111 R44 Series C143-2 Sensor (engine rpm) Wiring, nonapplicable by rotorcraft ship serial number. RHC Service Bulletin SB-112 Tail rotor Blades part number C029-3, daily visual inspection in accordance with part A visual inspection and part B replacement, nonapplicable by Tail Rotor Blade serial numbers installed, C029-3 serial number 15620 and serial number 15621. Previously complied with RHC Service Bulletin SB-113 A185-1, Bracket visual inspect in accordance with part I and installation of 5/32 countersunk rivets (A185-1 Bracket) as required. Complied with part II, Applied Torque Stripe Horizontally across rivets as required. Complied with RHC Service Bulletin SB-114 EMI/ Governor Controller upgrade in accordance with parts 1 thru 6, remove governor controller part number D270-1 serial number M21-12783 and installed new Governor Controller part number D270-1R serial number B24-10942. See Robinson Helicopter sales order number 381204 dated May 10th, 2024 for part details. Service Bulletin SB-115 Loose Gear Motors on Blt Tension Actuators complied with in accordance with parts 1 thru 5, no rotational play noted. Service Bulletin SB-116 Ground Handling Wheel Support Retention, nonapplicable by ship serial number. Complied with Airworthiness Directive AD 76-07-12 Bendix switches per part 1-ops checked no defects noted.
Airworthiness Directive AD 2023-11-07 Helicopters equipped with a Radar Altimeter in accordance with part I, information regarding certain operational restrictions (pertaining to 5G Cell tower networks) to be and inserted in the rotorcraft flight manual, section titled Supplements, inserted the yellow caution information. Airworthiness Directive AD 2024-04-02 Tail Rotor Tip Cap Visual Inspection of the tip cap bond line for corrosion in accordance with part (g)(1), nonapplicable by Tail Rotor Blade serial numbers installed, C029-3 serial number 15620 and serial number 15621. No further action required.

Inspected previously installed equipment;

Installed the J.P. Instruments (JPI) Fuel Flow Indicating System in accordance with the JPI Installation Manual FS-450, Report No. 400, revision B dated December 12th, 2012 in accordance with the J.P. Instruments Supplemental Type Certificate number SA00861SE. Performed the EMI Radio Test as required, section 11. No defects noted. The FAA approved Rotorcraft Flight Manual Supplement, Document No. 1, revision original, dated December 18th, 2000 has been inserted into Robinson Helicopter Pilot's Operating Handbook Section 9, Supplements.
Amended the Equipment List. Revised the Aircraft Weight and Balance.
Form 337 was filed with the Aircraft permanent records.

Installed the J.P. Instruments (JPI) Fuel Flow Transducer in accordance with the JPI Installation Manual FS-450, Report No. 503, revision B dated March 14th, 1997 in accordance with the J.P. Instruments Supplemental Type Certificate number SA00432SE. The FAA approved Rotorcraft Flight Manual Supplement, Document No. 1, revision original, dated December 18th, 2000 has been inserted into Robinson Helicopter Pilot's Operating Handbook Section 9, Supplements.
Amended the Equipment List. Revised the Aircraft Weight and Balance.
Form 337 was filed with the Aircraft permanent records.

Inspected the Longhorn Aviation Services LLC. Skid Step in accordance with the Longhorn Aviation Services Instructions for Continued Airworthiness and Installation Instructions document number LHA-44-ICA, revision original, dated July 15th 2020. No defects noted.

ADS-B functional test was complied with by Robinson Helicopter Co, see work order number dated March-23-2023, see section 7, radio and electronics check, of this log for details. ADS-B functional test next due March 3rd, 2025.

Complied with FAR 91-207 "d" ELT operational check of the Kannad 406AF Emergency Locator Transmitter serial number LX1102177091 in accordance with the Kannad Operational Manual number Doc S1851501-02 in accordance with the Kannad AF Integra /AF-H installation manual document number DOC09081E, revision 4, dated November 2nd, 2015, section 9, A thru C and Section 301-check, no defects noted. Inspected the Kannad battery kit 200, part number S1840510-01 serial number TM000016586 in accordance with the Kannad maintenance manual Section 25-63-07 and 08, document number S185X501-XX Revision one, OO, dated October 9th, 2015, no defects noted. Emergency locator transmitter Battery expires October 2028. ELT dongal programing work sheet included with work order.

Completed a Track and Balance of the Main Rotor System in accordance with Section 10.230, balanced to 0.01 Ips. Balanced the fan to 0.01 Ips in accordance with Section 6.240. Balanced the Tail Rotor to 0.01 IPS in accordance with section 10.240. I certify that this aircraft has been inspected in accordance with 100hr/Annual Inspection and was found to be in an airworthy condition on this date. Helicopters Northwest Technical Services, Inc. [REDACTED] President, Al [REDACTED]



6-4-2024 N323TT Robinson Helicopter R44 Raven II ship serial number 14626

Hobbs 60.0 Aircraft TT 60.0 Aircraft TSOH new

Lycoming engine model IO-540-AE1A5 engine serial number L-38270-48E.

Engine TT 60.0

Completed a ground check per part 2.205 of the Robinson Maintenance Manual. Completed a run up check per part 2.210 of the Robinson Maintenance Manual. Completed a flight check per part 2.220-no discrepancies noted. Aircraft approved for return to service. Helicopters Northwest Technical Services, Inc. [REDACTED] President, Al [REDACTED] Pilot fixedwing and Rotorcraft.



6-4-2 024 N323TT Robinson Helicopter R44 Raven II ship serial number 14626
Hobbs 60.0 Aircraft TT 60.0 Aircraft TSOH new
Lycoming engine model IO-540-AE1A5 engine serial number L-38270-48E
Engine TT 60.0

Installed the JPI Instruments Fuel Flow FS-450 fuel flow system in accordance with the FS450 Report number 400. Installed the JPI Instruments Fuel Flow Transducer kit part number P450000-P in accordance with drawing report number 700922. Transducer part number P450000-P was mounted between the throttle body and the fuel flow divider. Transducer was mounted to a piece of 0.070" aluminum (2024T3) plate below the throttle body. Transducer Mounting secured to airframe using Adel clamps as required. Mounting plate was finished using Desoprime CA7400A and CA7400B epoxy primer.

Installed the JPI Fuel Flow Instrument in the instrument panel using the existing 2.25" hole where chronograph clock was mounted. Moved chronograph clock to lower radio rack for convenience.

Installed Circuit Breaker in lower circuit breaker panel, Robinson Helicopter B297-1 Circuit Breaker (1-amp) labeled Fuel Flow Scanner. Connected the RS232 output port to the GTN750 in accordance with the JPI Instruments Drawing number 450507, revision NC, dated March 2000, (data bus number 5). Routed transducer wiring thru fire wall and along existing harness as required. Installed supplied placards (two each) required on instrument panel in clear view of pilot.

Performed system checkout, programed unit as required. No defects noted.

Revised the Weight and Balance. Amended the Equipment List. Completed the form 337's for the Fuel Flow Transducer, J.P. Instruments (JPI) Fuel Flow Transducer in accordance with the JPI Installation Manual FS-450, Report No. 503, revision B dated March 14th, 1997 in accordance with the J.P. Instruments Supplemental Type Certificate number SA00432SE.

Completed the form 337's for the J.P. Instruments (JPI) Fuel Flow Indicating System in accordance with the JPI Installation Manual FS-450, Report No. 400, revision B dated December 12th, 2012 in accordance with the J.P. Instruments Supplemental Type Certificate number SA00861SE.

Instructions For Continued Airworthiness:

Reference the J.P. Instruments Fuel Flow Installation Manual, section 15, latest revision, for Continued airworthiness.

There are No Field Adjustments and or Calibrations allowed for the J.P. Instruments Fuel Flow System. Maintenance is limited to Removal and Replacement of Components.

I Certify that this aircraft has been inspected with regards to the work performed and was approved for return to service on this date. Helicopters Northwest Technical Service, Inc. [REDACTED] President, Al [REDACTED]



Installed the J.P. Instruments (JPI) Fuel Flow Transducer in accordance with the JPI Installation Manual FS-450, Report No. 503, revision B dated March 14th, 1997 in accordance with the J.P. Instruments Supplemental Type Certificate number SA00432SE. The FAA approved Rotorcraft Flight Manual Supplement, Document No. 1, revision original, dated December 18th, 2000 has been inserted into Robinson Helicopter Pilot's Operating Handbook Section 9, Supplements.

Amended the Equipment List. Revised the Aircraft Weight and Balance.

Form 337 was filed with the Aircraft permanent records.

Installed the J.P. Instruments (JPI) Fuel Flow Indicating System in accordance with the JPI Installation Manual FS-450, Report No. 400, revision B dated December 12th, 2012 in accordance with the J.P. Instruments Supplemental Type Certificate number SA00861SE. Performed the EMI Radio Test as required, section 11. No defects noted. The FAA approved Rotorcraft Flight Manual Supplement, Document No. 1, revision original, dated December 18th, 2000 has been inserted into Robinson Helicopter Pilot's Operating Handbook Section 9, Supplements.
Amended the Equipment List. Revised the Aircraft Weight and Balance.
Form 337 was filed with the Aircraft permanent records.

On Fri, Jun 21, 2024 at 4:06 PM Fabian Salazar > wrote:

Rich,

Thank You for taking the time to talk with us today. Will you please forward copies of any maintenance records you may have of N323TT.

Thank You again for helping us with the investigation.

Very Respectfully

Fabian Salazar

Federal Way, Washington 98001