

R22 BETA
S/N: 3240

R22 S/N 3788
LOG 1

ENGINE LOG
EF5-1

NEW RECIPROCATING ENGINE CERTIFICATE

This is to certify that the engine as described hereinafter has been manufactured run-in and tested as prescribed by **TEXTRON LYCOMING** specifications and Federal Aviation Regulations. No further run-in is required. All applicable Federal Aviation Administration Directives and Textron Lycoming Service Bulletins have been complied with at time of Manufacture.

MODEL O-360-J2A

SERIAL NO. L-38145-36A

DATE

3/20/01

[Signature]
(AUTHORIZED REPRESENTATIVE)

TEXTRON Lycoming

652 Oliver Street
Williamsport, PA 17701 U.S.A.

FORM 37941

INSTALLATION RECORD

[illegible]

INSPECTION & MAINTENANCE RECORD

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
11-1-06	722.6	REMOVED ENGINE FROM R22 BETA II SN 3240. AIRCRAFT HAD A HARD LANDING. ENGINE TOTAL TIME @ REMOVAL WAS 722.6 HRS. — [REDACTED] AP [REDACTED] —

Date: 05/31/2007 **Total Time:** 722.6

WO# 06-1212

Repair performed to Lycoming engine model No. O-360-J2A, serial No. L-38145-36A. Visual and N.D.T. inspection methods performed. Dimensional checks completed as prescribed by the manufacture table of limits. Assembled the crankshaft assembly, crankcase section and accessory case section in accordance with Lycoming Direct Drive Overhaul Manual. Replaced main bearings 18A19441 & 18D23135, rod bearings 18M19389, rod bushings SL13923A, rod bolts 75061, rod nuts LW12186; crankshaft gear bolt STD-2246, dowel SL-STD-1065; oil pump housing AEL78531, oil relief ball 1028-B, oil relief spring SL61084, thermostatic valve SL53E19600 (33343); camshaft LW18840 and tappet bodies 72877; gaskets, seals and lock plates. Complied with the following Lycoming Service Bulletins: 439A Connecting rod inspection, 475C Crankshaft gear assembly procedures, 524 Oil pump inspection and impeller replacement. (end)

Appliances: No Cylinders or accessories accompanied this engine repair.



AP [REDACTED]

Christopher Leak

3-1-09 Hobbs 2200.0 ACTT 2200.0 Engine TT 722.6 N522SA SN 3788

This engine has been repaired in accordance with the applicable manufacturers overhaul manual and other FAA – approved procurers. Airworthiness Directives have been complied with thru A.D. 2008-19-05, see pages 5 and 6. All parts have been inspected and the accessories are either new or newly overhauled. New cylinders were installed. The power section was overhauled by Avian Aeronautics Inc. under work order 06-1212, see page 17 of this log book. Compression as follows #1 79/80, #2 78/80, #3 79/80, #4 79/80. This engine was run up, leak checked and a flight check. No defects were noted.

Right Magneto 10-163045-6 serial number E06CA139R

Left Magneto 10-163005-2 serial number E05DA240R.

Starter part number BC315-100-2 serial number 0507120506.

Carburetor part number 10-5217 serial number CK610556.

Alternator ALY8520LS serial number IO90658.

Oil Cooler 20008A serial number 1621.

Harnesses were new, 8 each new UREM40E plugs were installed.

Engine was serviced with 6 quarts of Aeroshell 80wt mineral oil.

I certify that this engine has been inspected in accordance with a 100 Hr / Annual Inspection and was found to be in an airworthy condition on this date.

Helicopters Northwest Technical Services Inc. Richard K. Carter, President,

AP [REDACTED] IA. [REDACTED] AP [REDACTED]



INSPECTION & MAINTENANCE RECORD

4-15-10 N522SA R22 Beta II SN 3788 ACTT 2696.8 AC TSOH 496.8
Engine SN L-38145-36A Eng TT 1219.4

Completed a 100 Hr Inspection in accordance with the Lycoming Operators Manual. Compression: #1 76/80, #3 76/80, #2 78/80, #4 78/80. Drained and serviced the engine oil system in accordance with Lycoming Service Bulletin SB480. Serviced with 6 quarts of Aeroshell 80W plus oil. Installed new AA48108-2 filter. Cleaned screens and filters. Inspected the carburetor body for fuel stains in accordance with the Lycoming Service Bulletin SB366, no defects noted. Cleaned, gapped and rotated the sparkplugs, replaced 4 ea REM38S plugs. Inspected the magneto in accordance with TCM Service Bulletin SB643. Removed the magnetos for a 500 Hr Inspection. Installed right hand magneto PN 10-600644-201 SN E060A139R. Installed left magneto PN 10-600614-1 SN E05DA240R. Set magnetos to 25 degrees BTC. Inspected the exhaust system, no defects noted. Replaced the air filter PN A771-1 with new. Complied with AD 84-26-02 paper filters. Installed new filter. I certify that this engine has been inspected in accordance with a 100 Hr Inspection and was found to be in an airworthy condition on this date. Helicopters Northwest Technical Services, Inc. Richard K. Carter, President, AP [REDACTED] IIA.

[REDACTED]



0-360-32A

L-38145-36A

ROBINSON HELICOPTER COMPANY

PART NO. EF5-1

REV. LTR N/A

P.O./LOT NO. 120172

QTY. 1



R22 S/N
Log 2 3788

AIRCRAFT LOG
AF5-1

AIRCRAFT DESCRIPTION

MANUFACTURER ROBINSON HELICOPTER COMPANY MODEL R22 BETA II DATE OF MFG. 2-16-05

SERIAL NUMBER 3788 REGISTRATION NUMBER N5225A

_REGISTERED OWNER _____
_STREET ADDRESS _____
_CITY, STATE, ZIP _____
_OPERATOR _____
_STREET ADDRESS _____
_CITY, STATE, ZIP _____
_REGISTERED OWNER _____
_STREET ADDRESS _____
_CITY, STATE, ZIP _____
_OPERATOR _____
_STREET ADDRESS _____
_CITY, STATE, ZIP _____

Inspection Status

[Check one]

☐

F.A.R. 91.409 ANNUAL/100 HOUR

☐

F.A.R. 91.409 PROGRESSIVE

☐

F.A.R. 135.419 A.T.C.O.

☐

OTHER

DATE ENTERED _____

MAINTENANCE RESPONSIBILITY

INSTALLED EQUIPMENT

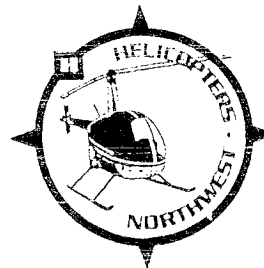
ITEM	MANUFACTURER	MODEL	SERIAL NO.
ENGINE	TEXTRON LYCOMING	O-360-J2A	L-38145-36A
INST. CLUSTER	ROCHESTER	B144-3	4500
OAT GAUGE	DAVTRON	307 FC	A08710
CARB AIR TEMP	MID CONTINENT	MD-11-5	H04-11570
ALTIMETER	UNITED INSTRUMENTS	5934P-3	441928
VERTICAL SPEED	UNITED INSTRUMENTS	7000	308766
AIRSPEED	UNITED INSTRUMENTS	8000	187493
MANIFOLD PRESS.	UNITED INSTRUMENTS	6111	189515
TACHOMETER	PHAOSTRON	A792-4	3477
GOVERNOR	ROBINSON HELICOTPER CO.	B286-2	3234
TRANSCIEVER	BENDIX/KING	KY197A	13234
TRANSPONDER	BENDIX/KING	KT76C	110738
BLIND ENCODER	TRANS CAL	SSD120-30A	A60997
ELT	POINTER, INC	3000-10	53528
ATTITUDE GYRO W/INCL	BF GOODRICH	1100-14S	25635
GPS	GARMIN	GPS400	96701533

MAINTENANCE RECORD **F.A.R. 43.9**

DATE OF COMPLETION	AIRCRAFT TIME IN SERVICE	DESCRIPTION OF WORK PERFORMED OR APPROVED DATA USED	AGENCY & CERTIFICATE NO. WORK PERFORMED/RETURNED TO SERVICE
3-1-09	Hobbs 2200.0	ACTT 2200.0 TSOH 0.0 N522SA SN 3788	
<p>This rotorcraft was overhauled and inspected in accordance with the current FAA regulations and the RHC Maintenance Manual Section 2.173 change 26 dated April 2007. A new Weight and Balance was preformed. All AD through 2007-26-12 and Service Bulletins through SB98 were completed. SB's and AD's complied with listed on page 9 of this log book. Life limited parts that have been replaced and major components that have been overhauled are listed on pages 5 and 6 of this log book. Replaced the throttle arm assy PN A011-2. Replaced the tail rotor push pull tube PN A121-17. Replaced the harness assemblies PN A628-4. Replaced the engine cooling panels. Replaced the exhaust muffler assy PN A169-. Replaced the aft cross tube PN A241-2. Replaced the M/R pitch change links, installed new swashplate boot PN A480-1. Replaced the alternator belt PN B173-1, replaced the A947-3, A947-2 and A947-1 flexplate assemblies. Installed an overhauled fan wheel assy PN B174-1. Installed a new right-out fire extinguisher PN B381-1. Replaced the A907-4 yoke and the A191-1 block. Installed a new RG-25XC aircraft battery. Replaced the A723-5, A723-6 oil line assemblies. Replaced the A780-2 and A780-33 battery cables. Replaced all A785 hoses. Installed new A190-2 V belt assy. Replaced the A 337-1 jackshaft. Inspected the aircraft wiring. Pressure tested the aircraft fuel tanks. Installed a new blue velour interior PN A003-2BL, A003-3BL, A003-10BL, A003-15BL and A914-1BL. Installed new carpets PN A469-11, A469-12, A469-13, A469-14, A469-18, A469-27, A469-33, and A469-34. An</p>			
			CONT

MAINTENANCE RECORD **F.A.R. 43.9**

DATE OF COMPLETION	AIRCRAFT TIME IN SERVICE	DESCRIPTION OF WORK PERFORMED OR APPROVED DATA USED	AGENCY & CERTIFICATE NO. WORK PERFORMED/RETURNED TO SERVICE
		<p>overhauled engine PN 0-360-J2A SN 38145-36A was installed. The aircraft was ground run. Balanced tail rotor to .01 Ips. Balanced the main rotor to .01 Ips. Aircraft was approved for return to service. Helicopters Northwest Technical Services Inc. Richard K. Carter, President, AP [REDACTED] IA.</p> <p>[REDACTED] [REDACTED]</p>	<p align="right"><i>[Signature]</i></p>



1-2-10 N522SA Robinson R22 SN 3788 ACTT 2600.0 TAC 2600.0 TSOH 400.0

Completed a 100 Hr / Annual Inspection in accordance with the Robinson Maintenance Manual. Drained and serviced the main rotor tail rotor gearboxes with A257-2 oil. Tail rotor drive shaft runout: .002, .004, .004, .005 aft. Replaced the lower sheave telatemp 110-2. Reshimmed the engine to 3.55" using 2 ea A141-5 shimms. Checked belt sheave alignment .035 right, .058 left. Clutch shaft angle and actuator length OK. Inspected the ELT battery PN 00-30-006 SN NA in accordance with the Artex Installation Instructions 571-3000 Rev A dated 03-09-06. ELT expiration date Aug 2010. Tested the ELT, Pointer 3000-10 SN 53528 in accordance with the Artex Installation Instructions 571-3000 Rev A dated 03-09-06. ELT expiration date June 2010. Tested the ELT. Pointer 3000-10 SN 53528 in accordance with FAR 91.207 "d" - no defects noted. Checked fan and tail rotor balance to .01 Ips. Inspected the aircraft battery in accordance with the Concorde Maintenance Manual 5-0142 Continued airworthiness dated Feb 20th 2007 - no defects noted. Complied with the RHC Service Bulletin SB89 A184-1 bearing regrease - Mobil 28 grease. Complied with the RHC Service Bulletin SB96, A016-4 main rotor blade visual inspect - no defects noted. Complied with AD 2007-26-12 per part a & c - no defects noted. Complied with AD 2007-26-12 per the AMOC dated Jan 18th 2008 - next due @ 2700.0 or 1-2-2011. Complied with AD 76-07-12 Bendix switch ops check per part 1 - no defects noted. Inspected the fire extinguisher in accordance with the right out monthly maintenance - no defects noted. I certify that this aircraft has been inspected in accordance with a 100 Hr / Annual Inspection and was found to be in an airworthy condition on this date. Helicopters Northwest Technical Services, Inc. Richard K. Carter, President, AP [REDACTED] IA.

[REDACTED]



INSPECTION RECORD

4-15-10 N522SA R22 Beta II SN 3788 ACTT 2696.8 AC TSOH 496.8

Completed a 100 Hr Inspection in accordance with the Robinson Maintenance Manual. Drained and serviced the main rotor tail rotor gearboxes with A257-2 oil. Tail rotor drive shaft runout: .002, .004, .004, .005 aft. Replaced the lower sheave telatemp 110-2. Checked the main rotor hub hinge friction. Replaced 2 ea A156-1 main rotor blade spindle boots. Serviced spindles with A257-15 fluid. Complied with AD 88-26-01 R2 dye pen inspect of the A158-1 spindles – no defects noted. Checked fan and tail rotor balance to .01 Ips. Inspected the aircraft battery in accordance with the Concorde Maintenance Manual 5-0142 Continued airworthiness dated Feb 20th 2007 – no defects noted. Complied with SL-56, A016-4 main rotor blade skin to spar visual inspection – no defects noted. Complied with the RHC Service Bulletin SB89 A184-1 bearing regrease – Mobil 28 grease. Complied with the RHC Service Bulletin SB96, A016-4 main rotor blade visual inspect – no defects noted. Complied with AD 2007-26-12 per part a & c - no defects noted. Complied with AD 2007-26-12 per the AMOC dated Jan 18th 2008, the Aircraft Pilots Operating Handbook Revision date May 13, 2009 - next due @ 2796.4 or 4/11/10. Complied with AD 76-07-12 Bendix switch ops check per part 1 – no defects noted. I certify that this aircraft has been inspected in accordance with a 100 Hr Inspection and was found to be in an airworthy condition on this date. Helicopters Northwest Technical Services, Inc. Richard K. Carter, President, AP [REDACTED] IA.

