

# INSTALLED EQUIPMENT

ITEM	MANUFACTURER	MODEL	SERIAL NO.
ENGINE	TEXTRON LYCOMING	IO-540-AE1A5	L-32971-48E
MAIN CLUSTER	ROCHESTER	B144-4	2490
DATA GAUGE	DAVTRON	307 FC	D12227
ALTITUDE	UNITED INSTRUMENTS	5934P-3	465121
VERTICAL SPEED	UNITED INSTRUMENTS	7000	321819
AIRSPEED	UNITED INSTRUMENTS	8000	199962
MANIFOLD PRESS.	UNITED INSTRUMENTS	6111	194300
TACHOMETER	PHAOSTRON	C792-4	4496
GOVERNOR	ROBINSON HELICOPTER CO.	D278-2	2449
CHRONOMETER	ASTROTECH	LC-2	00886
TRANSMITTER	BENDIX/KING	KY196A	32992
VERTICAL CARD COMPASS	PRECISION AVIATION	PAI-700	67156
DIRECTIONAL GYRO	MID CONTINENT	3300-10	L07-11356
ATTITUDE GYRO W/INCL	MID CONTINENT	4300-203	B08-10145
TRANSPONDER	GARMIN	GTX330	84130633
HEADLAMP ENCODER	TRANS CAL	SSD120-30N	10016
AUDIO CONTROL	NAT	AA12S-002	2357
GPS/COM	GARMIN	GNC420W	23200496

# INSTALLED EQUIPMENT

ITEM	MANUFACTURER	MODEL	SERIAL NO.
ELT	KANNAD	406 AF	2619958-0017
ENGINE			R
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# LIFE LIMITED PARTS OR OVERHAUL REQUIREMENTS 5/w 12391

*Main Rotor Blade  
Replaced 05/16  
Hobbs: 508.9*

NAME OF PART	PART NUMBER	SERIAL NUMBER	INSTALLATION DATE/HOURS	TIME ON PART AT INSTALL	LIFE LIMIT OR T.B.O.	REMOVAL DATE/HOURS	AGENCY CERT. NO.
MR Gearbox	C006-5	5192	JUN 20 '08 0	New	2200 TBO		INSTLD.RHC PC#424WE
<del>MR Blade</del>	<del>C016-5</del>	<del>5307</del>	<del>JUN 20 '08 0</del>	<del>New</del>	<del>2200 HR or 12 YEARS</del>		<del>INSTLD.RHC PC#424WE</del>
<del>MR Blade</del>	<del>C016-5</del>	<del>5373</del>	<del>JUN 20 '08 0</del>	<del>New</del>	<del>2200 HR or 12 YEARS</del>		<del>INSTLD.RHC PC#424WE</del>
MR Hwhaahplate	C017-4	4661	JUN 20 '08 0	New	2200 TBO		INSTLD.RHC PC#424WE
Frame Assy	C020-1	4869	JUN 20 '08 0	New	2200 Life		INSTLD.RHC PC#424WE
TR Gearbox	C021-1	4629	JUN 20 '08 0	New	2200 TBO		INSTLD.RHC PC#424WE
Tailcone Assy	C023-1	4941	JUN 20 '08 0	New	4400 Life		INSTLD.RHC PC#424WE
TR Blade	C029-2	7228	JUN 20 '08 0	New	2200 HR or 12 YEARS		INSTLD.RHC PC#424WE
TR Blade	C029-2	7223	JUN 20 '08 0	New	2200 HR or 12 YEARS		INSTLD.RHC PC#424WE
TR Hub Assy	D062-2	4448	JUN 20 '08 0	New	2200 Life		INSTLD.RHC PC#424WE
TR Pitch Control	C031-1	5189	JUN 20 '08 0	New	2200 TBO		INSTLD.RHC PC#424WE
Horiz Stab	C044-1	4864	JUN 20 '08 0	New	4400 Life		INSTLD.RHC PC#424WE
Actuator	C051-2	4877	JUN 20 '08 0	New	2200 TBO		INSTLD.RHC PC#424WE
MR Gearset	C146-5	5018	JUN 20 '08 0	New	2200 Life		INSTLD.RHC PC#424WE
MR Hub	C154-1	4916	JUN 20 '08 0	New	2200 Life		INSTLD.RHC PC#424WE
MR Spindle	C158-1	10241	JUN 20 '08 0	New	2200 Life		INSTLD.RHC PC#424WE
MR Spindle	C158-1	10233	JUN 20 '08 0	New	2200 Life		INSTLD.RHC PC#424WE
Clutch Shaft	C166-5	0008	JUN 20 '08 0	New	2200 TBO		INSTLD.RHC PC#424WE





# ALTIMETER & STATIC SYSTEM CHECKS

## F.A.R. 91.411

DATE	MANUFACTURER	MODEL	SERIAL NO.	LOCATION	MAX. ALT.	RECHECK REQUIRED	APPROVED BY: AGENCY      CERT. NO.
MAR 10 08	United Instruments	5934R-3	465121	N/A	N/A	N/A	RHC PC 424WE
JUN 17 08	RHC Pitot System Leak Check			N/A	N/A	N/A	RHC PC 424WE
JUN 17 08	RHC Static System Leak Check			N/A	N/A	24 CAL MONTHS	RHC PC 424WE

THE ALTIMETER AND STATIC SYSTEM AND AUTOMATIC ALTITUDE REPORTING SYSTEM HAVE BEEN TESTED AND INSPECTED PER FAR 91.411, RPS 77 AND HAVE BEEN FOUND TO COMPLY WITH FAR PART 43, APPENDIX E AND ALSO MEETS EASA.R.AMOC.01117 FOR COMPLIANCE WITH EASA AD 2006-0265. THE FOLLOWING EQUIPMENT HAS BEEN TESTED TO 16,000 FEET: (A804 AND C804 INSTAL. RECORDS ARE ON FILE AT RHC)

ALTIMETER S/N 465121      ENCODER/DIGITIZER S/N 10016

SIGNED       DATE 10 JUN 2008

ROBINSON HELICOPTER COMPANY  
PROD. CERT. NO. 424WE


# RADIO & ELECTRONIC CHECKS

DATE	TOTAL TIME	EQUIPMENT CHECKED	TYPE OF CHECK	ERROR OR RESULTS	NEXT CHECK DUE	CHECKED BY: SIGNATURE — CERT. NO.
0 Jul-08	0	KY196A	FUNCTIONAL	PASS	N/A	<i>[Signature]</i> RHC PC424WE
0 Jul-08	0	GNC420W	FUNCTIONAL	PASS	N/A	<i>[Signature]</i> RHC PC424WE
10 Jun-08	0	GTX330	FUNCTIONAL	PASS	24 CAL MONTHS	<i>[Signature]</i> RHC PC424WE
10 Jun-08	0	SSD120-30N	FUNCTIONAL	PASS	24 CAL MONTHS	<i>[Signature]</i> RHC PC424WE
0 Jul-08	0	406 AF	FUNCTIONAL	PASS	N/A	<i>[Signature]</i> RHC PC424WE
0 Jul-08	0	AA12S-002	FUNCTIONAL	PASS	N/A	<i>[Signature]</i> RHC PC424WE

THE FOLLOWING TRANSPONDER HAS BEEN TESTED PER FAR 91.413, RPS 77 AND HAS BEEN FOUND TO COMPLY WITH FAR PART 43, APPENDIX F AND ALSO MEETS EASA.R.AMOC.01117 FOR COMPLIANCE WITH EASA AD 2006-0265. (A804 AND C804 INSTAL. RECORDS ARE ON FILE AT RHC)

MFG: Garmin MODEL GTX330 SIN 84130633

SIGNED *[Signature]* DATE 10 JUN 2008

ROBINSON HELICOPTER COMPANY  
PROD. CERT. NO. 424WE

Make: **Robinson**

Model: **R44 II**

Serial No.: **12391**

Airframe Hobbs: **504.1**

**Cove Helicopter**

200 Airport Rd

Duncansville PA 16635

**CRS 3EHR977A**

Reg. No.: **N513TL**

Date: **3/21/2016**

WO# **N513TL-022616**

Page: 1 of 1

### Log Book Entry

#### Description of Work Accomplished

I certify that the transponder tests required by FAR 91.413 have been performed and the above equipment meets the requirements of part 43, Appendix F.

#### Approval for Return to Service

The article(s) identified above was repaired and inspected in accordance with current FAA regulations and is approved for return to service.

Authorized Signature:

 **3EHR977A**

DATE

TO  
I



# 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
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Make: Robinson Model: R44 II Serial No.: 12391 Airframe TSN: 508.9 Hobbs: 608.9    Total Time: 508.9	<h2 style="margin: 0;">Cove Helicopter</h2> <h3 style="margin: 0;">Airframe</h3> <h3 style="margin: 0;">Log Book Entry</h3> <h3 style="margin: 0;">CRS 3EHR977A</h3>	Reg. No.: N513TL Date: 5/7/16 WO# N513TL-050716 Page: 1 Of 1
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**Description of Work Accomplished**

**Installed:** C005-12.CS Main rotor blade set provided by owner under RHC SO# 266641. C005 has the following sub assy. C010-7 Blades serial numbers 7085 & 7117, C158-1 Spindles serial numbers 20483 & 20486. Installed with new bolts, nuts and cotter pins. Balance MR Assy to 0.04 @1:54. Installed serviceable D079-1 Tail rotor guard with 281.7 hours total time.

**Approval for Return to Service**

The article(s) identified above was repaired and inspected in accordance with current FAA regulations and is approved for return to service.

Authorized Signature: CRS 3EHR977A

05/26/17	550.0	Sanded insert color and sprayed changing from orange to silver. Weight and balance negligible. Airframe Approved for return to service.
		James T. Rudy ATP 31668 97

# 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
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MAKE: ROBINSON MODEL: R-44 II S/N: 12391 REG. NO: N513TL DATE: 12 SEPT. 2019  
A/C TT: 762.4

Replaced D743-3 electric fuel pump (s/n:210675). Run up ops check ok.  
Approved for return to service.

*Thomas R. Wilson*  
Thomas R. Wilson AP3049347

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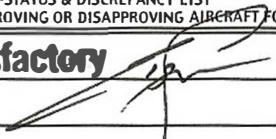
INSPECTION RECORD  
F.A.R. 43.11-91.409

DATE  
AA 11 08  
AIRCRAFT TIME  
IN SERVICE

KIND OF INSPECTION-STATUS & DISCREPANCY LIST  
SIGNATURE — CERT. NO. OF PERSON APPROVING OR DISAPPROVING AIRCRAFT FOR SERVICE

4.0

**FAA Production Flight Test Satisfactory**



4.9

I find the rotorcraft eligible for the certification requested and have issued an Export Certificate of Airworthiness FAA Form 8130-4 E444409

LAMAR GONZALEZ

No. ODARF606172NM

43

# INSPECTION RECORD

## F.A.R. 43.11-91.409

*S/n 12391*

DATE	AIRCRAFT TIME IN SERVICE	KIND OF INSPECTION-STATUS & DISCREPANCY LIST SIGNATURE — CERT. NO. OF PERSON APPROVING OR DISAPPROVING AIRCRAFT FOR SERVICE		
	Make: <b>Robinson</b>	Cove Helicopter	Reg. No.:	<b>N513TL</b>
	Model: <b>R44 Raven II</b>	200 Airport Rd	Date:	<b>21<sup>st</sup> March 2016</b>
	Serial No.: <b>12391</b>	Duncansville PA 16635	WO#	<b>N513TL-022616</b>
	Airframe TSN: <b>504.1</b>	814-414-9099	<b>Log Book Entry</b>	
	Hobbs: <b>504.1</b>	Total Time: <b>504.1</b>	Page:	<b>1 of 1</b>

**Description of Work Accomplished**

Complete 100hr inspection in accordance with Robinson R44 100hr/Annual inspection. Inspected s/n 12391 to conform to TCDS H11NM, RHC MM Section 3 Life limited parts and Lycoming TCDS 1E4. AD's check to date 2016-05. Verified Life limited and time limited components. Removed old registration numbers and Installed new US Reg number N513TL. Verify installation of STC's: SA00701SE Precise Flight Pulsites, SR02051NY DART Floor Mats, SR02148NY DART cold weather kit, and SR01937NY DART Cargo mirror. (See historical record for times 4.9 to 504.1 hours September 2008 to March 21<sup>st</sup> 2016)


**CW** AD 2011-12-10 MR Blades by new blades installed inspection due before each flight see POH pilot log.

**CW** SB 72 Bond line inspection and marking of line next due each flight see pilot log.

*I certify this **airframe** and **engine** conform to the  
Type certificate data sheets H11NM (Robinson R44) and 1E4 (Lycoming IO-540-AE1A5)*

**Approval for Return to Service**

The article(s) identified above was repaired and inspected in accordance with current FAA regulations and is approved for return to service.

Authorized Signature:  CRS EHR977A

**MAR 22 2016** *I have inspected this helicopter and issued a FAA Form 8100-2 standard Airworthiness Certificate in normal category.*

*Eugene C Breiner DART-323001/CA*

# INSPECTION RECORD

## F.A.R. 43.11-91.409

DATE  
AIRCRAFT TIME  
IN SERVICE

KIND OF INSPECTION-STATUS & DISCREPANCY LIST  
SIGNATURE — CERT. NO. OF PERSON APPROVING OR DISAPPROVING AIRCRAFT FOR SERVICE

### Markey Aviation

397 South St Clintondale NY, 12515

Robinson R-44 N513TZ S/N: 12391

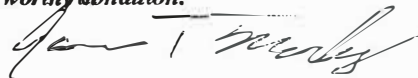
Hobbs Time: 561.7

08, July 2017

1. Completed Annual Inspection IAW Robinson Helicopter 100hr/Annual Inspection checklist
2. Opened all inspection panels, removed cowling and wheel pants.
3. Lubricated airframe as required.
4. Checked control rods with proper condition found.
5. Inspected landing skids with no defect noted.
6. Removed interior and all interior panels for inspection.
7. Visually inspected airframe and components with no defects noted.
8. Removed Kanrad ELT S/N: 2619958-0017 and inspected for condition and proper operation IAW FAR 91.207.
9. All ad's complied with thru 07/17.
10. Closed all inspection panels. Installed wheel pants and cowls.

*I certify this Aircraft was inspected in accordance with  
an Annual Inspection and found to be in an airworthy condition.*

James T. Markey A&P3166872IA





# INSPECTION RECORD

## F.A.R. 43.11-91.409

AIRCRAFT TIME  
IN SERVICE

KIND OF INSPECTION-STATUS & DISCREPANCY LIST  
SIGNATURE — CERT. NO. OF PERSON APPROVING OR DISAPPROVING AIRCRAFT FOR SERVICE

### Markey Aviation

397 South St Clintondale NY, 12515

Robinson R-44 N513TL S/N: 12391

13, October 2018

Hobbs Time: 572.3

1. Completed Annual Inspection IAW Robinson Helicopter 100hr/Annual Inspection checklist
2. Opened all inspection panels, removed cowlings.
3. Lubricated airframe as required.
4. Checked control rods with proper condition found.
5. Inspected landing skids with no defect noted.
6. Removed interior and all interior panels for inspection.
7. Visually inspected airframe, blades, rotor system and components with no defects noted.
8. Removed Kanrad ELT S/N: 2619958-0017 and inspected for condition and proper operation IAW FAR 91.207.
9. All ad's complied with thru 10/18.
10. Closed all inspection panels.

*I certify this Aircraft was inspected in accordance with  
an Annual Inspection and found to be in an airworthy condition.*

James T. Markey A&P3166872LA



# INSPECTION RECORD

## F.A.R. 43.11-91.409

DATE	AIRCRAFT TIME IN SERVICE	KIND OF INSPECTION-STATUS & DISCREPANCY LIST SIGNATURE — CERT. NO. OF PERSON APPROVING OR DISAPPROVING AIRCRAFT FOR SERVICE
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### Markey Aviation

397 South St Clintondale NY, 12515

Robinson R-44 N513TL S/N: 12391

29, November 2018

Hobbs Time: 573.4

1. Removed Kanrad ELT battery and replaced with new. (P/N: S1820506-01) Installed S/N: 18110165 .

*Functional check of work completed satisfactory*

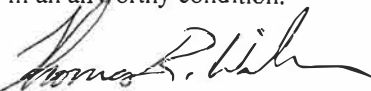
James T. Markey A&P31668721A



MAKE: ROBINSON MODEL: R-44 II S/N: 12391 REG. NO: N513TL DATE: 16 JULY 2019  
A/C TT: 672.4

1. Performed 100 HR. Inspection with reference to Robinson Helicopter Maintenance Manual.
2. Airworthiness directives checked thru 2019-14.
3. Sheeve alignment: Left 0.099" Right 0.075"
4. Verified compliance with RHC service bulletins.
5. Complied with RHC SB# 93A. Checked torque on vertical stabilizer attach bolts. 2 Bolts moved but less than on flat.
6. Complied with RHC SB#99. Installed KI-264-1 kit onto battery support bracket.
7. Complied with RHC SB# 100. Inspected induction hose I/A/W SB. Found to be airworthy.
8. Replaced both D575-1 Front Door Shocks.

I certify that this aircraft has been inspected in accordance with a 100 hour inspection and was determined to be in an airworthy condition.



Thomas R. Wilson AP30493471A

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# INSPECTION RECORD F.A.R. 43.11-91.409

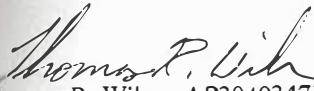
AIRCRAFT TIME  
IN SERVICE

KIND OF INSPECTION-STATUS & DISCREPANCY LIST  
SIGNATURE — CERT. NO. OF PERSON APPROVING OR DISAPPROVING AIRCRAFT FOR SERVICE

MAKE: ROBINSON MODEL: R-44 II S/N: 12391 REG. NO: N513TL DATE: 25 SEPT. 2019  
A/C TT: 771.6

1. Performed Annual Inspection with reference to Robinson Helicopter Maintenance Manual.
2. Airworthiness directives checked thru 2019-19.
3. Sheeve alignment: Left 0.109" Right 0.085"
4. Verified compliance with RHC service bulletins.
5. TRDS runout all less than .005"
6. Inspected and lubed C181-3 bearing per RHC manual.
7. AD 2019-12-18 is not applicable on this helicopter, however, the induction hose was inspected for condition per the AD and was found to be airworthy.
8. Replaced AN6235-1A hydraulic filter.
9. Replaced C771-2 Air filter.
10. ELT check per FAR 91.207 note: battery due for replacement 02/2025
11. Inspected, cleaned, and function checked MRGB and TRGB chip detectors.

I certify that this aircraft has been inspected in accordance with a 100 Annual inspection and was determined to be in an airworthy condition.

  
Thomas R. Wilson AP30493471A