

N 228 ML

AIRCRAFT LOG
AF5-1

The subject aircraft was involved in an incident / accident on 8/8/2024 rendering it a Constructive Total Loss as not repairable within its insured value. For further details refer to insurance claim: 1572918323US.

Signed: ***Underwriters Salvage Company***

Date: **3/27/2025**

ALG Aerospace Adjustment Services Inc
3500 Lenox Road, Suite 1100

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

**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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ROBINSON R44I N225ML S/N 1810

Date 09-07-2023 Hobbs/TT 1730.4

Inspect per Robinson R44 100Hr/annual inspection section in maintenance manual. Checked sheave alignment to (right .130; left .120) and tested clutch switches per manual. Cleaned fuel bowl screen. Checked tail rotor drive shaft runout (within specs). Installed a new AN6235-1A hydraulic filter. Lubricated the C181-3 lower bearing in accordance with 1140. Installed new engine air filter. Installed a new helicopter left Acorn Welding LTD. exhaust collector P/N C169-5AWL S/N IOGJF-603. Checked exhaust for cracks and leaks. Checked all lights for operation. Installed serviceable main rotor blades P/N C016-7 S/N 8514 and S/N 9044 and spindles P/N C158-1 S/N 22534 and S/N 22536 (Updated time life parts in front of log book). Tracked main rotor blades and balanced to .08 IPS @ 7:30.

Signed D. Van Donselaar Danny Van Donselaar A/P 27697601/A
Knoxville Aviation 1545 Hwy 14 South Knoxville IA 50138

ROBINSON R44I N225ML S/N 1810

Date 09-07-2023 Hobbs/TT 1730.4

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

Signed D. Van Donselaar Danny Van Donselaar A/P 27697601/A
Knoxville Aviation 1545 Hwy 14 South Knoxville IA 50138

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ROBINSON R44I N225ML S/N 1810

Date 06-15-2024 Hobbs/TT 1763.0

Inspect per Robinson R44 100Hr/annual inspection section in maintenance manual. Checked sheave alignment to (right .120; left .110) and tested clutch switches per manual. Cleaned fuel bowl screen. Checked tail rotor drive shaft runout (within specs). Checked exhaust for cracks and leaks. Checked all lights for operation. Cleaned and reinstalled engine air filter. Installed new right rear strut rain cap (P/N C747-2). Installed a new A215-222 and A215-13 packings on main rotor gearbox to hydraulic pump. Installed new A130-40 spacer on rotor brake arm. Removed Bendix/King KY-197A S/N 15374 and reinstalled after repair from Skycom Avionics, Inc. (see FAA Form 8130-3 dated 4-24-2024). Complied with AD# 2024-04-02 by inspection of tail rotor blades.

Signed D. Van Donselaar Danny Van Donselaar A/P 27697601/A

ROBINSON R44I N225ML S/N 1810

Date 06-15-2024 Hobbs/TT 1763.0

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

Signed D. Van Donselaar Danny Van Donselaar A/P 27697601/A

INSPECTION RECORD

ROBINSON R44I N225ML S/N 1810

Date 05-01-2023 Hobbs/TT 1571.6

Inspect per Robinson R44 100Hr/annual inspection section in maintenance manual. Checked sheave alignment to (right .136; left .120) and tested clutch switches per manual. Cleaned fuel bowl screen. Checked tail rotor drive shaft runout (within specs). Installed overhauled D278-1 governor control assembly S/N 3366. Removed all three hydraulic servos and installed overhauled servos P/N D212-1 S/N's 0226A, 0234A, and 563A (see 8130-3 forms dated 13/Mar/2023 from Robinson Helicopter company) with new O-rings and backup rings, and updated time life parts section in log book. Installed a new AN6235-1A hydraulic filter. Performed clutch assembly lubricant and servicing per 7.210. Drain and service main rotor and tail rotor gearboxes per 1.120 and 1.130. Cleaned main rotor and tail rotor chip detectors per 1.115. Lubricated the C181-3 lower bearing in accordance with 1140. Installed new engine air filter. Installed new front door gas springs P/N D575-1 and aft door gas springs P/N C394-1. Replaced left side engine baffling P/N A305-7 and A305-8. Checked exhaust for cracks and leaks. Checked all lights for operation.

Signed D.V.D. Danny Van Donselaar A/P 2769760I/A
Knoxville Aviation 1545 Hwy 14 South Knoxville IA 50138

ROBINSON R44I N225ML S/N 1810

Date 05-01-2023 Hobbs/TT 1571.6

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

Signed D.V.D. Danny Van Donselaar A/P 2769760I/A
Knoxville Aviation 1545 Hwy 14 South Knoxville IA 50138

INSPECTION RECORD F.A.R. 43.11-91.409

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ROBINSON R44I N225ML S/N 1810

Date 07-29-2023 Hobbs/TT 1674.0

Inspect per Robinson R44 100Ihr/annual inspection section in maintenance manual. Checked and adjusted sheave alignment to (right .130; left .120) and tested clutch switches per manual. Cleaned fuel bowl screen. Serviced hydraulic reservoir with 5606 and checked hydraulic system for leaks. Checked tail rotor drive shaft runout (within specs). Installed new engine air filter. Installed new A305-7 engine baffling on right side. Checked exhaust for cracks and leaks. Checked all lights for operation.

Signed D.V.D. Danny Van Donselaar A/P 2769760I/A
Knoxville Aviation 1545 Hwy 14 South Knoxville IA 50138

ROBINSON R44I N225ML S/N 1810

Date 07-29-2023 Hobbs/TT 1674.0

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

Signed D.V.D. Danny Van Donselaar A/P 2769760I/A
Knoxville Aviation 1545 Hwy 14 South Knoxville IA 50138

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ROBINSON R44I N225ML S/N ~~0942~~ 1810 *DVD*
 Date 04-07-2022 Hobbs/TT 1251.4
 Inspect per Robinson R44 100Hr/annual inspection section in maintenance manual. Checked sheave alignment to (right .110; left .133) and tested clutch switches per manual. Cleaned fuel gascolator screen. Checked tail rotor drive shaft runout (within specs). Installed overhauled hydraulic servos P/N D212-1R (S/N 31229, 31248, 8035) with new packings and retainers. Serviced hydraulic system with 5606 and checked for leaks. Installed serviceable strobe power supply P/N A490ATSCF S/N 22427. Installed new rotor brake switch P/N D049-4. Installed new engine air filter. Checked exhaust for cracks and leaks (none found). Checked all lights for operation. Installed new RG-35AXC aircraft battery (S/N 41205861). Installed serviceable lower vertical stabilizer and stinger. Complied with tail skid strike inspection per sections 2.510 A. and B. (no other damage or cracks found).
 Signed *DVD* Danny Van Donselaar A/P 27697601/A
 Knoxville Aviation 1545 Hwy 14 South Knoxville IA 50138

ROBINSON R44I N225ML S/N ~~0942~~ 1810 *DVD*
 Date 04-07-2022 Hobbs/TT 1251.4
 I certify that this aircraft has been inspected in accordance with an Annual/100HR inspection and was determined to be in airworthy condition.
 Signed *DVD* Danny Van Donselaar A/P 27697601/A
 Knoxville Aviation 1545 Hwy 14 South Knoxville IA 50138

ROBINSON R44I N225ML S/N ~~0942~~ 1810 *DVD*
 Date 07-28-2022 Hobbs/TT 1378.0
 Inspect per Robinson R44 100Hr/annual inspection section in maintenance manual. Checked and adjusted sheave alignment to (right .130; left .145) and tested clutch switches per manual. Cleaned fuel gascolator screen. Installed a new A558-2 aft tail boom cover and checked tail rotor drive shaft runout (within specs). Installed a new AN6235-1A hydraulic filter. Lubricated the C181-3 lower bearing in accordance with 1140. Installed new engine air filter. Checked exhaust for cracks and leaks (none found). Checked all lights for operation.
 Signed *DVD* Danny Van Donselaar A/P 27697601/A
 Knoxville Aviation 1545 Hwy 14 South Knoxville IA 50138

ROBINSON R44I N225ML S/N ~~0942~~ 1810 *DVD*
 Date 07-28-2022 Hobbs/TT 1378.0
 I certify that this aircraft has been inspected in accordance with an Annual/100HR inspection and was determined to be in airworthy condition.
 Signed *DVD* Danny Van Donselaar A/P 27697601/A
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A & S HELICOPTERS, INC.
3300 VECTOR DRIVE
CAHOKIA, IL 62206

N225ML SER. NO. 1810 ROBINSON R44 RAVEN T.T. 1152.6
HOUR METER 1152.6 ENGINE SER. NO .L-26776-40E T.T. 1152.6

Completed a 100 Hour / Annual Inspection I/A/W Appendix D of Part 43 and portions of Robinson Helicopter checklist. C/W SB-94, Lower actuator bearing brackets. Replaced worn Upper and Lower sissor Rod Ends with NEW. Transponder test C/W by Mueller Avionics.

The aircraft identified above was repaired and or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service with respect to work performed. Pertinent details are on file at this Repair Station under Work Order No: 784 Date 06/12/2020 Signed: *[Signature]* for A & S Helicopters, Inc. Repair Station No. S12R162L

ROBINSON R44I N225ML S/N 0942 1810 *[Signature]*
Date 07-01-2020 *[Signature]* Hobbs/TT 1161.7

Inspect per Robinson R44 100Hr/annual inspection section in maintenance manual. Checked and adjusted sheave alignment to (right .100; left .125) and tested clutch switches per manual. Installed KI-233-1 nose panel kit per service bulletin SB-102. Cleaned fuel gascolator screen. Checked tail rotor drive shaft runout (within specs). Installed new Danger decals on tail. Installed new C261-16 upper mast rib. Installed new engine air filter. Checked exhaust for cracks and leaks (none found). Checked all lights for operation. Installed new B173-3 alternator belt and upgraded sprag clutch retainer plates per Robinson SB. Installed EDM 700 engine monitoring system in accordance with STC SA2586NM. Installed Ag Pilot X agricultural GPS as a minor alteration. Installed a simplex spray system P/N HPR44III25201-402 S/N 244/0201 in accordance with STC SR00286BO. Updated weight and balance records.

Signed *[Signature]* Danny Van Donselaar A/P 27697601/A
Knoxville Aviation 1545 Hwy 14 South Knoxville IA 50138

ROBINSON R44I N225ML S/N 0942 1810 *[Signature]*
Date 07-01-2020 *[Signature]* Hobbs/TT 1161.7

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

Signed *[Signature]* Danny Van Donselaar A/P 27697601/A
Knoxville Aviation 1545 Hwy 14 South Knoxville IA 50138

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A & S HELICOPTERS, INC.
 4000 VECTOR DRIVE
 CAHOKIA, IL 62206

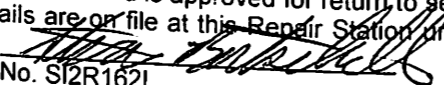
A & S HELICOPTERS, INC.
 3300 VECTOR DRIVE
 CAHOKIA, IL 62206

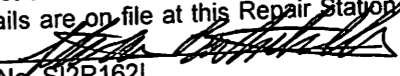
N225ML SER. NO. 1810 ROBINSON R44 RAVEN T.T. 1087.4
 HOUR METER 1087.4 ENGINE SER. NO .L-26776-40E T.T. 1087.4

N225ML SER. NO. 1810 ROBINSON R44 RAVEN T.T. 1118.9
 HOUR METER 1118.9 ENGINE SER. NO .L-26776-40E T.T. 1118.9

Completed a 100 Hour / Annual Inspection I/A/W Appendix D of Part 43 and portions of Robinson Helicopter checklist. C/W SB-89 and AD2016-26-04, M/R Blade modification. C/W 91, Ammeter Circuit fuse Protection. C/W SB-93A, Horizontal Stab torque. C/W SB-94, Lower actuator bearing brackets. M/R and T/R gearbox oil changed. Lower M/R gearbox chip detector replaced with New.

Completed a 100 Hour / Annual Inspection I/A/W Appendix D of Part 43 and portions of Robinson Helicopter checklist. C/W SB-94, Lower actuator bearing brackets. Replaced worn T/R bumper with new.

The aircraft identified above was repaired and or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service with respect to work performed. Pertinent details are on file at this Repair Station under Work Order No: 360 Date 04/02/2018 Signed: 

The aircraft identified above was repaired and or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service with respect to work performed. Pertinent details are on file at this Repair Station under Work Order No: 576 Date 05/02/2019 Signed: 
 for A & S Helicopters, Inc. Repair Station No. SI2R162L

INSPECTION RECORD

F.A.R. 43.11-91.409

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

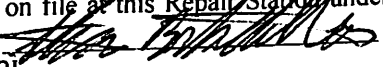
DATE AIRCRAFT TIME IN SERVICE

TIMES TRANSFERRED FROM NEW ZEALAND
AIRCRAFT LOGBOOK VOLUME ONE DATED 1/9/08

A & S HELICOPTERS, INC.
4000 VECTOR DRIVE
CAHOKIA, IL 62206

N225ML SER. NO. 1810 ROBINSON R44 RAVEN T.T. 1019.9
HOUR METER 1019.9 ENGINE SER. NO .L-26776-40E T.T. 1019.9

Completed a 100 Hour / Annual Inspection I/A/W Appendix D of Part 43 and portions of Robinson Helicopter checklist .Aircraft reassembled after shipment from New Zealand. SB-83. Not applicable any longer. C/W-84, Fuel Cap Decal. Installed New Battery RG-25XC. S/N 40762724.

The aircraft identified above was repaired and or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service with respect to work performed. Pertinent details are on file at this Repair Station under Work Order No: 5117656 Date 11/05/2015 Signed: 
for A & S Helicopters, Inc. Repair Station No. SI2R162L

RADIO & ELECTRONIC CHECKS

DATE	TOTAL TIME	EQUIPMENT CHECKED	TYPE OF CHECK	ERROR OR RESULTS	NEXT CHECK DUE	CHECKED BY: SIGNATURE — CERT. NO.	
			Model # <u>KT 76C</u>	Serial # <u>21205</u>			
			Aircraft N <u>2-29ML</u>	Date: <u>Nov 18 2015</u>			
			Transponder system tested in accordance with part 43, Appendix "F" & Appendix "E", Subpart (c) for compliance with FAR 91.413.				
			Signature: <u>[Signature]</u>	Work Order # <u>9406</u>			
			MUELLER AVIONICS, INC.	CRS # <u>QYVR044J</u>			
			Model # <u>KT 76C</u>	Serial # <u>21205</u>			
			Aircraft N <u>2-29ML</u>	Date: <u>MARCH 14 2018</u>			
			Transponder system tested in accordance with part 43, Appendix "F" & Appendix "E", Subpart (c) for compliance with FAR 91.413.				
			Signature: <u>[Signature]</u>	Work Order # <u>10297</u>			
			MUELLER AVIONICS, INC.	CRS # <u>QYVR044J</u>			
<u>28-19</u>			INSTALLED GARMIN GDL-82 P/N 011-08946-40, S/N 4PF005354 I/A/W				
			GDL INSTALLATION MANUAL DOC# 190-01810-00 AT STATION B-5 AND				
			ANTENNA 013-00235-00 GA 35, S/N 173334 AT STATION 200.2 USED				
			EXISTING COAX CABLE IN AIRCRAFT. INSTALLED ADS-B OUT SYSTEM				
			WAS SHOWN TO MEET EQUIP PERFORMANCE REQUIREMENT OF 14 CFR SEC. 91.227				
			<u>[Signature]</u> A&S HELICOPTERS INC SIZR162L				

LIFE LIMITED PARTS OR OVERHAUL REQUIREMENTS

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.
BEARING ASSY	C181-3	4602	12/13/07 0.0	0.0	2200		
SPRAG CLUTCH	C188-3	5970	12/13/07 0.0	0.0	2200		
M/R DRIVESHAFT	D224-2	5312	7/14/15 1015.5	0.0	2200		
M/R DRIVESHAFT	C251-2	R5198	12/13/07 0.0	0.0	4400		
MRGB SUMP	C263-2	2147	12/13/07 0.0	0.0	2200		
MRGB HOUSING	C264-1	4658	12/13/07 0.0	0.0	2200		
T/R GEARSET	C545-1	9857	7/14/15 1015.5	0.0	2200		
LWP SWASHPLATE	C198-2	4538	12/13/07 0.0	0.0	2200		
MAIN TANK BLADDER	D028-1	1310310211	2/10/14 868.4	0.0	4400		
AUX TANK BLADDER	D028-2	1310910281	2/10/14 868.4	0.0	2200		
T/R GUARD	D079-1	4707	12/13/07 0.0	0.0	2200		
HYD RESERVOIR ASSY	D211-1	3297	12/13/07 0.0	0.0	2200		
HYD SERVO ASSY E/H	D212-1	9937	12/13/07 0.0	0.0	2200		
HYD SERVO ASSY R/H	D212-1	9936	12/13/07 0.0	0.0	2200	4-7-2022 1251.4	
HYD SERVO ASSY AFT	D212-1	9931	12/13/07 0.0	0.0	2200	4-7-2022 1251.4	
HYD PUMP	D500-1	3435	12/13/07 0.0	0.0	2200	4-7-2022 1251.4	
				0.0	2200		

LIFE LIMITED PARTS OR OVERHAUL REQUIREMENTS

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.
HYD SERVO ASSY L/H	D212-1R	31229	4-7-2022 1251.4	0.0	2200	12-01-2022 1571.6	AIP2769769 I/A
HYD SERVO ASSY R/H	D212-1R	31248	4-7-2022 1251.4	0.0	2200	12-01-2022 1571.6	AIP2769769 I/A
HYD SERVO ASSY AFT	D212-1R	8035	4-7-2022 1251.4	0.0	2200	12-01-2022 1571.6	AIP2769760 I/A
Hyd servo	D212-1R	5635A	5-1-2023 1571.6	0.0	2200		AIP2769760 I/A
Hyd servo	D212-1R	0234A	5-1-2023 1571.6	0.0	2200		AIP2769760 I/A
Hyd servo	D212-1R	0226A	5-1-2023 1571.6	0.0	2200		AIP2769760 I/A
M/R Blade	C016-7	8514	9-7-2023 1730.4	1378.7	12 year 2200	3-7-19	AIP2769760 I/A
M/R Blade	C016-7	9044	9-7-2023 1730.4	1378.7	12 year 2200	3-7-19	AIP2769760 I/A
M/R Spindle	C158-1	22534	9-7-2023 1730.4	1378.7	2200		AIP2769760 I/A
M/R Spindle	C158-1	22536	9-7-2023 1730.4	1378.7	2200		AIP2769760 I/A

LIFE LIMITED PARTS OR OVERHAUL REQUIREMENTS

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.
M/R GEARBOX	C006-5	4658	12/13/07 0.0	0.0	2200		
M/R BLADE	C016-7	4763	7/21/14 905.0	0.0	2200 12 YEARS	9-7-2023 1730.4	D. V. SH A/P 2769760 I/A
M/R BLADE	C016-7	4786	7/21/14 905.0	0.0	2200 12 YEARS	9-7-2023 1730.4	D. V. SH A/P 2769760 I/A
M/R WASH PLATE	C017-4	4198	12/13/07 0.0	0.0	2200		
FRAME ASSY	C020-1	4339	12/13/07 0.0	0.0	2200		
T/R GEARBOX	C021-1	1055	7/14/15 1015.5	0.0	2200		
TAIL CONE ASSY	C023-1	4395	12/13/07 0.0	0.0	4400		
T/R BLADE	C024-3	4656	7/14/15 1015.5	0.0	12 YEARS 2200		
T/R BLADE	C029-3	4659	7/14/15 1015.5	0.0	12 YEARS 2200		
T/R HUB	G062-1	3137	7/14/15 1015.5	0.0	2200		
T/R PITCH CONTROL	C031-1	4653	12/13/07 0.0	0.0	2200		
HORIZONTAL STABILIZER	C044-1	4351	12/13/07 0.0	0.0	2200		
M/R GEARSET	C146-5	4566	12/13/07 0.0	0.0	2200		
ACTUATOR	C051-1	4402	12/13/07 0.0	0.0	2200		
M/R HUB	C154-1	4397	12/13/07 0.0	0.0	2200		
M/R SPINDLE	C158-1	17828	7/24/14 1015.5	0.0	2200	9-7-2023 1730.4	D. V. SH A/P 2769760 I/A
M/R SPINDLE	C158-1	17831	7/24/14 1015.5	0.0	2200	9-7-2023 1730.4	D. V. SH A/P 2769760 I/A
CLUTCH SHAFT	C166-4	5224	12/13/07 0.0	0.0	2200		

AIRCRAFT DESCRIPTION

MANUFACTURER ROBINSON MODEL R44 RAVEN I DATE OF MFG. 12-13-2007

SERIAL NUMBER 1810 REGISTRATION NUMBER N 225ML

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 _____

CAA 2101



CIVIL AVIATION AUTHORITY
OF NEW ZEALAND

AIRCRAFT LOGBOOK

VOLUME ONE

DATE OPENED 9.1.08

DATE CLOSED 5.11.15

ZK- HBT



Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

 Central Aero Engineering
 CIVIL / 14 21299

DATE	TYPE	R44	REG	HBT	HRS	1019.3	JOB #	3656	SHEETS	2 of 2
ENGINEER NAME	P. Waterhouse	SIGN :			INITIALS :			AMEL #	21299	
ENGINEER NAME	S.M. Grainger	SIGN :			INITIALS :			AMEL #	24612	
ENGINEER NAME	K. Sami	SIGN :			INITIALS :			AMEL #	24894	
ENGINEER NAME	H. Ross	SIGN :			INITIALS :			AMEL #		

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
9	Lycoming SI 1191A Cylinder compression Inspection due :	Inspection carried out - Refer Item 2 this job.	
10	Lycoming SI 1080C Maint items for special attention :	Inspection carried out IAW Lycoming SI 1080C - NIL Faults.	
11	100 Hr / 12 Month ELT test / inspection due :	ELT test carried out IAW Rule Part 43 Appendix F and Kannad Installation & Maintenance manual. Self test carried out - NIL faults found.	
12	DCA / R44 / 32A MRB bonding inspection due :	Inspection carried out IAW AD instructions - NIL faults found.	
13	DCA / R44 / 27A Cabin door hinge security inspection due :	Inspection carried out IAW AD instructions - 1 x Cotter Ring missing L/H Rear door - Replaced - PN B427-1, RN SH047275.	
14	Air Filter replacement 100 Hr due :	Air Filter replaced with PN 42097, RN 17329.	
15	Engine Oil Filter change 100 Hr due :	Oil Filter replaced with PN AA48108-2, RN 606792.	
16	Engine Run Post Maintenance Required :	1013 (300'), 15°C, 100% NF, MAP 14°, OIL P 100 PSI, OIL T 80 CHT 250° F. MAGS < 2% each.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	SM Grainger	Sign		Amel #	24612	Date	4/09/15
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Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	TYPE	R44	REG	HBT	HRS	1019.3	JOB #	3656	SHEETS	1 of 2
ENGINEER NAME	P. Waterhouse	SIGN :			INITIALS :			AMEL #	21299	
ENGINEER NAME	S.M. Grainger	SIGN :			INITIALS :			AMEL #	24612	
ENGINEER NAME	K. Sami	SIGN :			INITIALS :			AMEL #	24894	
ENGINEER NAME	H. Ross	SIGN :			INITIALS :			AMEL #		

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
1	100 Hr Inspection due :	100 Hr Inspection carried out IAW Robinson R44 Maintenance Manual Section 2 410. Inspection carried out IAW Lycoming IO-540 Operators Handbook Section 4.	
2	Engine leak down inspection due :	As follows: 1 80 / 78, 3 80 / 77.5, 5 80 / 79, 2 80 / 76, 4 80 / 76, 6 80 / 76.	
3	Lycoming SB 366B Carburettor throttle body screw inspection due :	Inspection carried out IAW Lycoming SB 366B - NIL Faults.	
4	Lycoming SB 480E Oil + Filter change due :	Filter replacement and oil change carried out during 100 Hr inspection.	
5	TCM SB643B Maintenance intervals for all TCM & Bendix Magneto's due :	External Inspection carried out. Mag timing checked - SATIS.	
6	TCM SB 658 Distributor gear maint due :	Not due.	
7	TCM SB663A Two wire magneto tacho breaker.	Not due.	
8	Lycoming SI 1129B Methods of checking DC Alternator & generator belt tension.	Inspection carried out IAW Lycoming SI 1129B - NIL Faults.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	SM Grainger	Sign		Amel #	24612	Date	4/09/15
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SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward							
4-9-15	1.4						<u>2</u> Loose Leaf Log Entry attached
	1020	7					In <u>3656</u> Date <u>4-9-15</u>
							Name <u>WATSON</u> No. <u>21299</u>
							<u>100hr @ 1019.3 TT.</u>



Harvard Lane, Ardmore Airfield
Auckland, New Zealand
Ph: +64 9 296 2644
Fax: +64 9 296 2645

LOG BOOK ENTRY

LOG ENTRY TYPE: A/F Log Entry		LOCATION: Ardmore		JOB NO: 43708	PAGE NO: 1
AIRCRAFT TYPE:	R44	ENGINE 1		ENGINE 2	
REGISTRATION:	ZK-HBT	ENGINE TYPE:		ENGINE TYPE:	
SERIAL NO:	1810	SERIAL NO:		SERIAL NO:	
AIRFRAME		HOURS:		HOURS:	
HOURS:	1020.70 Hours	0-540-F1B5		0.00 Hours	
CYCLES:	0.00 Cycles (LDGS)	L-26776-40E		0.00 Np Cycles	
PROPELLORS		1020.70 Hours		0.00 Ng Cycles	
		CYCLES:		CYCLES:	
		0.00 Starts		0.00 Starts	
		STARTS:		STARTS:	
		0.00		0.00	
		PROP 1 (HRS):		PROP 2 (HRS):	
		0.00		0.00	

Jobs Title: ZK-HBT Export COA

- Carried out Export COA IAW CAA Rule Pt21.
- Carried out Compass Swing.
- Review all Airworthiness Directives and found compliant.
- Removed and repaired pilots seat belt assy. Reinstall original belt p/n 501907-223 s/n 36469AC Batch OA25727.
- De-Fuel helicopter.
- Carried out helicopter Re-Weigh law R44 MM Refer form 2173/2102 for details.
- Remove M/R Blades / Aux fuel tank / Mani fuel tank / MGB assy for shipping.
- Remove Vertical/Hori Stabilizer for shipping.
- Disconnect A/C battery for shipping.
- Drain MGB oil for shipping.
- Helicopter packed into 40ft HC shipping Container for shipping to USA.
- * Helicopter requires reassembly after shipment /MGB/Fuel Sys/MR Blades/Vert-Hor stab/MGB oil- Operational test flight prior to flight *

THE MAINTENANCE RECORDED HAS BEEN CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF NEW ZEALAND CIVIL AVIATION RULE PART 43 AND IN RESPECT OF THAT MAINTENANCE THE AIRCRAFT IS RELEASED TO SERVICE.

NAME Russell Goulden

SIGNATURE

Auth No. OAL044

For and on behalf of Oceania Aviation Limited

DATE: 00/00/0000

Total Carry Forward

We certify that a duplicate safety inspection has been carried out and the identified control system of the Aircraft/Component functions correctly, and in respect of the maintenance performed the control system is assembled and locked correctly.

TALL ROTOR Control system
From FNO BOOM AREA to TIE STRAPS.
Name MATOUHOUSS Sign [Signature] 21249
Name GRANJOR Sign [Signature] 24612
Date 15-8-15

We certify that a duplicate safety inspection has been carried out and the identified control system of the Aircraft/Component functions correctly, and in respect of the maintenance performed the control system is assembled and locked correctly.

M/R Control system
From UPPER PCL'S to Blade/Hows
Name P. MATOUHOUSS Sign [Signature] 21249
Name S. GRANJOR Sign [Signature] 24612
Date 25-8-15



Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	14/07/15	TYPE	R44	REG	HBT	HRS	1015.5	JOB #	3628 + 3653	SHEETS	2 of 2
ENGINEER NAME	P. Waterhouse	SIGN :				INITIALS :			AMEL #	21299	
ENGINEER NAME	S.M. Grainger	SIGN :				INITIALS :			AMEL #	24612	
ENGINEER NAME	K. Sami	SIGN :				INITIALS :			AMEL #	24894	
ENGINEER NAME	H. Ross	SIGN :				INITIALS :			AMEL #		

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
4	Re-Fit Tail Boom :	Tail Boom re-fitted IAW R44 Maintenance Manual, all contents & wing re-connected. Refer duplicate inspection certification attached. Re-fit Tail Rotor Guard. Fill T/R Gearbox with oil, PN A201, RN 17823.	
5	Re-Fit Main Rotor Blades :	Main Rotor Blades re-fitted, bolts stretched and split pinned as required.	
6	Tail Light Inoperable :	Fault traced to broken wire inside horizontal stabiliser. Short length of earth wire replaced - OPS now SATIS.	
7	Tail Rotor Assembly to be Balanced :	Tail Rotor Balance carried out IAW RHC R44 Maintenance Manual, Chapter 10-233. Tail Rotor Balanced to 0.14 IPS @ 12:08. Equipment removed and hardware re-locked Bare hardware re-painted.	
8	Update log Books for component change :	Logs updated as required.	
9	Aircraft Groom required :	Aircraft groom carried out.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	P. Waterhouse	Sign		Amel #	21299	Date	25/08/15
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Central Aero Engineering

Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	14/07/15	TYPE	R44	REG	HBT	HRS	1015.5	JOB #	3628 + 3653	SHEETS	1 of 2
ENGINEER NAME	P. Waterhouse	SIGN :					INITIALS :			AMEL #	21299
ENGINEER NAME	S.M. Grainger	SIGN :					INITIALS :			AMEL #	24612
ENGINEER NAME	K. Sami	SIGN :					INITIALS :			AMEL #	24894
ENGINEER NAME	H. Ross	SIGN :					INITIALS :			AMEL #	

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
1	Operator reports tail rotor strike on ground run up :	Travel Hamilton - Te Awamutu. Inspect machine and review phone camera video of incident. Sequence of events confirmed. Main rotor blades, tail rotor blades, tail boom removed & aircraft transported to Central Aero Engineering Hamilton premises.	
2	The following items U/S due damage or mandatory replace post T/R strike :	Complete T/R Assembly - New T/R Assy installed, SN 4656, 4659, 3137, RN 8130-3, 366615. AFT Flex Plate + Bolts - New AFT Flex Plate, PN C947-3, RN 8130-3, 366615. T/R Drive Shaft - New installed, PN D224-2, SN 5312, RN 9843. T/R Gear box + Mount Bolts - New TR G/Box installed, CO21-1, RN 8130-3 124497, SN 1055. FWD D/Shaft Flex Plate - New FWD Flex Plate, PN 19947-2, RN 8130-3 366615. Upper Stabiliser - New installed, PN C042-1, RN 8130-3 366615 & Painted. Lower Stabiliser - PWS installed, PN C043-1, RN FM ² # 5031 & Painted. Bolts replaced, NAS6604-4, RN 1555, Cap Screws, NAS1352-5H12P, RN 1555, Bolt NAS6604-7, RN 16055.	
3	T/R Gear Box Casting requires NDT :	Casting paint stripped, cleaned, dye penetrant inspection carried out - NIL defects found. Casting re-painted.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service

Name	P. Waterhouse	Sign		Amel #	21299	Date	25/08/15
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Central Aero Engineering Ltd

35

We certify that a duplicate safety inspection has been carried out and the identified control system of the Aircraft/Component functions correctly, and in respect of the maintenance performed the control system is assembled and locked correctly.

TIR ANTI TORQUE Control system

From TAL BOOMPIR to BEACONK

Name S. COOPER Sign [Signature]

Name P. L. [Signature] Sign [Signature]





Date 26-5-2015






AT ROOM / RISCORGE Junction

24612

21299

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

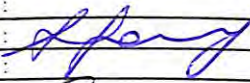



DATE	18/05/15	TYPE	R44	REG	HBT	HRS	1003.5	JOB #	3586	SHEETS	5 of 5
ENGINEER NAME	P. Waterhouse	SIGN :				INITIALS :				AMEL #	21299
ENGINEER NAME	S.M. Grainger	SIGN :				INITIALS :				AMEL #	24612
ENGINEER NAME	K. Sami	SIGN :				INITIALS :				AMEL #	24894
ENGINEER NAME	H. Ross	SIGN :				INITIALS :				AMEL #	









ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
34	Post Maintenance Ground Run Required :	QNH 1013 175FT, QFE 1007, OAT 16°C, NR 101.0%, MFP 14.5 Hg, OIL PX 100 PSI, OIL Temp 180°F, CHT 300°F, MAGS @ 101.0% L/H >5%, R/H >5%.	
35	DCA/R44/23A - Over-running Clutch Inspection Required :	Tail Boom Assembly removed + re-fitted IAW RHC R44 Maintenance Manual, Chapter 4.330. Clutch Assembly removed IAW RHC R44 Maintenance Manual, Chapter 7.200. Over-running Clutch Assembly, PN C188-3, SN 5970 Rev G TSO 1003.5, R/C 5711.	
36	Duplicate Inspection required on Anti-Torque Bell crank at tail boom junction :	Duplicate Inspection carried out - See Separate entry for duplicate.	
37	Remove fixed point fittings for Helipod :	Fittings removed from skids and fuselage. Flight Manual supplement removed. CAA 2173 Weight & Balance form amended accordingly.	
38	Lower Actuator Bearing due 3 Year / 300 Hr Lube :	Bearing C181-3 lubricated IAW RHC R44 Maintenance Manual, Chapter 1.140.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.


Name	SM Grainger	Sign		Amel #	24612	Date	26/05/15
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Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1



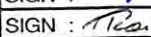

DATE	18/05/15	TYPE	R44	REG	HBT	HRS	1003.5	JOB #	3586	SHEETS	4 of 5
ENGINEER NAME	P. Waterhouse	SIGN :				INITIALS :			AMEL #	21299	
ENGINEER NAME	S.M. Grainger	SIGN :				INITIALS :			AMEL #	24612	
ENGINEER NAME	K. Sami	SIGN :				INITIALS :			AMEL #	24894	
ENGINEER NAME	H. Ross	SIGN :				INITIALS :			AMEL #		










ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
26	Re-Lock with Torque Seal head hardware :	Items disturbed re-torque sealed.	
27	Corrosion / Paint missing off both MRB Tips :	Corrosion removed by abrasive method, re-primed with Zinc Phosphate, re-fitted and re-painted in two pot yellow.	
28	Exhaust Muffler Cracked :	Fit new Muffler, PN C169-3, RN 9701, with original clamps + new hardware. L/H Shroud replaced due to cracking.	
29	Slight Drive Belt rub on rear frame assembly :	Area cleaned + inspected. Mylar tape placed in rub areas.	
30	Corrosion on Tail Rotor Blades :	Remove corrosion off Tail Rotor Blades using abrasive method. Treat with Alodine and Etch Primer. Top coat in two pot Black paint.	
31	Exhaust Shield Cracked / Broken :	Fit new Exhaust shield, PN D-314-2, RN SH049029.	
32	T/R Balance Required Post Re-Paint :	Balance equipment installed IAW RHC R44 Maintenance Manual 10-240. Balance carried out .15IPS @ 9:59.	
33	Blower Assembly Required Dynamic Balance :	Balance Equipment installed IAW RHC R44 Maintenance Manual 6-240. Blower balanced to 0.01 IPS @ 7:29.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.


Name	SM Grainger	Sign		Amel #	24612	Date	26/05/15
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Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1


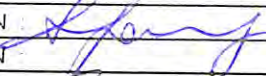
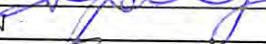

DATE	18/05/15	TYPE	R44	REG	HBT	HRS	1003.5	JOB #	3586	SHEETS	3 of 5
ENGINEER NAME	P. Waterhouse	SIGN :					INITIALS :			AMEL #	21299
ENGINEER NAME	S.M. Grainger	SIGN :					INITIALS :			AMEL #	24612
ENGINEER NAME	K. Sami	SIGN :					INITIALS :			AMEL #	24894
ENGINEER NAME	H. Ross	SIGN :					INITIALS :			AMEL #	









ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
17	RHC SL 48 - RSA 10AD1 :	As DCA/MA/19 carried out every 200 Hrs - N/A this installation.	
18	RHC SL 49 - M/R Blades - Embodied :	Embodied - New Blades installed previous.	
19	RHC SL 50 - D210 Corrosion Resistant Nuts :	Carried out as required.	
20	RHC SL 51 - Torx Plus Screws :	Carried out as required.	
21	RHC SL 52 - Full Throttle caution lights :	Optional.	
22	RHC SB 88 - Landing Attach Nuts :	N/A by S/N°.	
23	T/R Drive Shaft - Plastic viewing cover Replacement Required :	Replacement Inspection panel installed, PN 558-2.	
24	Cotter Ring Missing off L/H Rear Door Lower Hinge :	Cotter Ring replaced, PN B427-1, RN SH047275.	
25	Corrosion on M/R Head :	Corrosion removed by abrasive method, treated with Alodine & Etch Primer. Re-coat with 2 pot paint.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

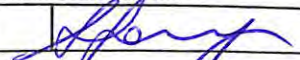
Name	SM Grainger	Sign		Amel #	24612	Date	26/05/15
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Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	18/05/15	TYPE	R44	REG	HBT	HRS	1003.5	JOB #	3586	SHEETS	2 of 5
ENGINEER NAME	P. Waterhouse	SIGN					INITIALS		AMEL #	21299	
ENGINEER NAME	S.M. Grainger	SIGN					INITIALS	SG	AMEL #	24612	
ENGINEER NAME	K. Sami	SIGN					INITIALS		AMEL #	24894	
ENGINEER NAME	H. Ross	SIGN					INITIALS	HR	AMEL #		

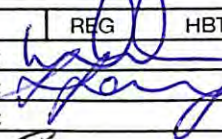
ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
9	Lycoming SI 1191A Cylinder compression Inspection due :	Inspection carried out as follows: 1 80 / 72, 2 80 / 74, 3 80 / 70, 4 / 80 / 70, 5 80 / 74, 6 80 / 64.	
10	Lycoming SI 1080C Maint items for special attention :	Inspection carried out IAW SI 1080C - NIL Faults.	
11	100 Hr / 12 Month ELT test / inspection due :	ELT test carried out IAW Rule Part 43 Appendix F and Kannad Installation & Maintenance manual. Self test carried out - NIL faults found.	
12	DCA/R44/32B - MRB bonding inspection due :	Inspection carried out IAW AD instructions - NIL faults found.	
13	DCA/R44/27A Cabin door hinge security inspection due :	Inspection carried out IAW AD instructions - 1 x Cotter Ring missing - 1 installed, PN B427-1, RN SH047275.	
14	Air Filter replacement 100 Hr due :	Air Filter replaced with PN 42097, RN 17329.	
15	Engine Oil Filter change 100 Hr due :	Oil Filter replaced with PN AA48108-2, RN 606530.	
16	RHC SL 47 - Tacho Points :	RHC SL47 carried out - NIL Faults Noted.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	SM Grainger	Sign		Amel #	24612	Date	26/05/15
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Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	18/05/15	TYPE	R44	REG	HBT	HRS	1003.5	JOB #	3586	SHEETS	1 of 5	
ENGINEER NAME	P. Waterhouse	SIGN :					INITIALS :		AMEL #	21299	Cen	
ENGINEER NAME	S.M. Grainger	SIGN :					INITIALS :		AMEL #	24612		
ENGINEER NAME	K. Sami	SIGN :					INITIALS :		AMEL #	24894		
ENGINEER NAME	H. Ross	SIGN :					INITIALS :	HR.	AMEL #			

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
1	100 Hr Inspection due :	100 Hr Inspection carried out IAW Robinson R44 Maintenance Manual Section 2 410. Inspection carried out IAW Lycoming IO-540 Operators Handbook Section 4.	SP
2	Engine leak down inspection due :	Refer Item 9.	SP
3	Lycoming SB 366B Carburettor throttle body screw inspection due :	Inspection carried out IAW Lycoming SB 366B	TRo.
4	Lycoming SB 480E Oil + Filter change due :	Filter replacement and oil change carried out during 100 Hr inspection.	TRo.
5	TCM SB643B Maintenance intervals for all TCM & Bendix Magneto's due :	Checked for compliance - DCA/ELECT/51B Refers.	TRo.
6	TCM SB 658 Distributor gear maint due :	Checked for compliance - SATIS	TRo.
7	TCM SB663A Two wire magneto tacho breaker.	Checked for compliance - SATIS	TRo.
8	Lycoming SI 1129B Methods of checking DC Alternator & generator belt tension.	Inspection carried out IAW Lycoming SI 1129B.	TRo.





The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.




Name	SM Grainger	Sign		Amel #	24612	Date	26/05/15
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We certify that a duplicate safety inspection has been carried out and the identified control system of the Aircraft/Component functions correctly, and in respect of the maintenance performed the control system is assembled and locked correctly.

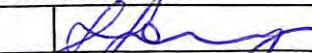
T/RODR Control system
From SLIDER to TESTER BOLT / PCL.
Name S. O'NEILL Sign [Signature] 24612.
Name P. WILKINSON Sign [Signature] 21299.
Date 6-7-15


Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	30/06/15	TYPE	R44 R1	REG	HBT	HRS	1013.7	JOB #	3623	SHEETS	2 of 2
ENGINEER NAME	P. Waterhouse	SIGN :				INITIALS			AMEL #	21299	
ENGINEER NAME	S.M. Grainger	SIGN :				INITIALS :			AMEL #	24612	
ENGINEER NAME	K. Sami	SIGN :				INITIALS			AMEL #	24894	
ENGINEER NAME	H. Ross	SIGN :				INITIALS :			AMEL #		

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
8	DCA/ELECT/3C + 6C - Mag Switch 500 Hr Inspection due :	Remove Mag Switch and check contacts - Found SATIS. Re-fit Mag Switch. Ground run carried out - OPS - NORMAL.	
9	Tail Rotor Requires Post Installation Dynamic Balance :	Balance Equipment installed IAW RHC R44 Maintenance Manual, Chapter 10.240. Dynamic Balance carried out using VIBREX 2000. Balance adjusted to 0.08 IPS @ 4:15. Balance Equipment removed. All bolts check tightened + Torque Sealed as required.	
10	Duplicate Inspection on Tail Rotor Assembly Required :	Duplicate Inspection carried out on Tail Rotor Installation - Refer Certification overleaf.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	SM Grainger	Sign		Amel #	24612	Date	6/07/15
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Name	SM Grainger	Sign		Amel #	24612	Date	26/05/15
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Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	30/06/15	TYPE	R44 R1	REG	HBT	HRS	1013.7	JOB #	3623	SHEETS	1 of 2
ENGINEER NAME	P. Waterhouse	SIGN :				INITIALS :		AMEL #	21299		
ENGINEER NAME	S.M. Grainger	SIGN :				INITIALS :	<i>SG</i>	AMEL #	24612		
ENGINEER NAME	K. Sami	SIGN :				INITIALS :		AMEL #	24894		
ENGINEER NAME	H. Ross	SIGN :				INITIALS :	<i>HR</i>	AMEL #			

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
1	Tail Rotor Elastomeric Bearing to be Replaced due to inner bush delaminated :	Tail Rotor Hub + Blades removed IAW RHC R44 Maintenance Manual, Chapter 9.210 1-3. Tail Rotor Elastomeric Bearing replaced by Rotor & Wing on R/C 5756. Tail Rotor / Hub re-fitted IAW RHC R44 Maintenance Manual, Chapter 9.220 A1-A9. See separate entry for Dynamic Balance - Item 9.	<i>SG</i>
2	Rear Cowl AFT attach bracket cracked :	Fit AFT Cowl attach bracket off aircraft ZK-HRR. PN D300-1, Fm ² Refers.	<i>HR</i>
3	Corrosion to be removed from various places on airframe :	Remove corrosion on lower cooling shroud. Treat with Alodine & prime. Remove corrosion patch on horizontal stabiliser, patches on tail boom and on M/R Mast. Treat all corrosion patches with Alodine & Zinc Phosphate Primer.	<i>HR</i>
4	Corrosion on Skids where Helipods supports clamp on :	Remove both landing skids and remove surface corrosion with abrasives. Alybrite both skid surfaces and Alodine. Skids re-painted in two pot black by Fleet Image.	<i>HR</i>
5	Flight Manual Revision Required :	Flight Manual Revision carried out - now March 2015 Rev status.	<i>SG</i>
6	Cotter Rings missing from Doors :	4 x Cotter Rings replaced - PN B427-1, RN SH047275.	<i>SG</i>
7	Corrosion on Blade Tips :	Remove Blade Tips and Corrosion. Treat tips & re-paint. Re-fit Tips to Blades.	<i>HR</i>

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	SM Grainger	Sign	<i>SG</i>	Amel #	24612	Date	6/07/15
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Name	SM Grainger	Sign	<i>SG</i>	Amel #	24612	Date	6/07/15
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SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unservice		
	Daily Total	Since Manufacture	Recorder Reading						
	Hours	Hours	Hours						
Total Brought Forward		936 80							
2-12-14	16								
8-12	19								
9-12	10								
14-12	12								
18-12	6								
19-12	17								
23-12	15								
29-12	12								
31-12	16								
2-1-15	11								
8-1-15	8								
9-1-15	12								
13-1	4								
15-1	31								
17-1	21								
20-1	10								
20-1	10	986	60						
18-3-15	9								
21-3	11								
27-3	5								
1-4-15	13								
4-4	7								
8-4	4								
12-4	3								
16-4	8								
20-4	6	993	70						
Total Carry Forward		993	70						



Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	26/02/15	TYPE	R44 R1	REG	HBT	HRS	JOB #	3532	SHEETS	1 of 1
ENGINEER NAME	P. Waterhouse	SIGN :				INITIALS :		AMEL #	21299	
ENGINEER NAME	S.M. Grainger	SIGN :	<i>[Signature]</i>			INITIALS :	<i>SG</i>	AMEL #	24612	
ENGINEER NAME	K. Sami	SIGN :				INITIALS :		AMEL #	24894	
ENGINEER NAME	H. Ross	SIGN :				INITIALS :		AMEL #		
ITEM #	WORK REQUIRED			WORK CARRIED OUT						INITIALS
1	Helicopter Grounded IAW DCA/R44/31 - Main Rotor Blade Cracking :			Helicopter flown for 1 off to Central Aero Engineering pending decision on PN C016-7 Main Rotor Blades.						<i>[Signature]</i>
2	DCA/R44/32 - Main Rotor Blade Inspection every pre-flight :			In receipt of DCA/R44/32 allowing continued operation provided MRB Inspected every pre-flight and Pilot Maintenance Certified. Blades inspected & Pilot instructed. Issued letter of authority under Rule Part 43, 43.51 C1, copy of RHC Safety Note 33 + copy of AD. Helicopter Released to Service.						<i>[Signature]</i> <i>[Signature]</i> <i>[Signature]</i>
The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.										
Name	SM Grainger	Sign	<i>[Signature]</i>	Amel #	24612	Date	26/02/15			

SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward		909 20					
10-9-14	14						<u>1</u> Loose Leaf Log Entry attached
14-9	8						In <u>3496</u> Date <u>7-1-15</u>
18-9	11						Name <u>MATTHEWS</u> No. <u>2128</u>
19-9	15						<u>SETR</u>
22-9	12						
25-9	13						
27-9	19						
11-10-14	13						<u>1</u> Loose Leaf Log Entry attached
20-10-14	22						In <u>3532</u> Date <u>26-2-15</u>
23-10	24						Name <u>S. Granger</u> No. <u>24612</u>
28-10	21						
2-11	28						
8-11	27						
10-11	15						
16-11	9						
20-11	9						
20-12-14	29						
27-12	32						
8-1-15	42						
22-1	51						
16-2-15	5 9						
19-2	28						
22-2	33						
1-3-15	27						
12-3-15	10						
29-11-14	29						
Total Carry Forward		936	80				



I certify that an Annual/~~Biennial~~ Review of Airworthiness has been carried out on this aircraft and that the requirements of Civil Aviation Rule 43.153(a) have been complied with using form CAA 24066 Current Revision.

Name Paul Waterhouse

Next ARA Due 7-11-15

No IA-21299

Signed 

Date 28-11-14

...and the date above constitutes a Release to Service as follows: "The work

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	21/07/14	TYPE	R44 RI	REG	HBT	HRS	905.0	JOB #	3390	SHEETS	5 of 5
ENGINEER NAME	P. Waterhouse	SIGN :		INITIALS :		AMEL #	21299				
ENGINEER NAME	S.M. Grainger	SIGN :		INITIALS :		AMEL #	24612				
ENGINEER NAME	K. Sami	SIGN :		INITIALS :		AMEL #	24894				
ENGINEER NAME	H. Ross	SIGN :		INITIALS :		AMEL #					

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
23	Stainless Tapes on Engine Require Replacing :	Stainless Tape re-applied as required.	
24	Engine Induction Gaskets Require Replacement :	Engine Induction Gaskets x 2 replaced - PN 75906, RN 21352, AMO.	
25	Various areas of corrosion on Airframe :	Corrosion removed from engine cowls & under belly and patch repair carried out on L/H side Cowl.	
26	Duplicate on MRH, PCL's, Blades :	Duplicate Inspection - Refer Over Page.	
27	Hydraulic Filter Change due :	Replacement Hydraulic Filter installed IAW R44 M/M, Chap 1.170 - NIL contamination in filter. Hydraulic level topped up.	
28	100 Hr Inspection on Helipod due :	Fixed items Inspected IAW PMO-11-HP, R44 II SLTL-25-007 - NIL Faults.	
29	Cellphone holder to be removed at Customers Request :	Cellphone Holder removed + wiring stowed. New CAA 2129 issued.	
30	SL46 - Air Filter Replacement:	Noted! Parts supply.	
	SL 47 -	Next 100 Hr / Annual Inspection.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	SM Grainger	Sign		Amel #	24612	Date	25/08/14
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P. Waterhouse
LAME / TA 2129
Central Aero Engineering Ltd



ITEMS
16, 17, 18, 19

We certify that a duplicate safety inspection has been carried out and the identified control system of the Aircraft/Component functions correctly, and in respect of the maintenance performed the control system is assembled and locked correctly.

Cyclic / Collecting Control system

From SWASHROD to NRH + BLADES + PCL'S

Name S. Connor Sign [Signature] 24612

Name P. WOODHOUSE Sign [Signature] 21299

Date 25-8-14

Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	21/07/14	TYPE	R44 RI	REG	HBT	HRS	905-0	JOB #	3390	SHEETS	3 of 5	
ENGINEER NAME	P. Waterhouse	SIGN :				INITIALS :			AMEL #	21299		
ENGINEER NAME	S.M. Grainger	SIGN :				INITIALS :			AMEL #	24612		
ENGINEER NAME	K. Sami	SIGN :				INITIALS :			AMEL #	24894		
ENGINEER NAME	H. Ross	SIGN :				INITIALS :			AMEL #			

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
16	Whilst performing DCA/R44/29B - MRB Insp found to have delamination - both blades require replacing.	Both Blade assemblies removed, PN C016-2, Blade SN 6577, spindle PN C158-1, SN 9146 OFF. PN C016-2 Blade SN 6573, Spindle PN C158-1, SN 9136 OFF. Teeter Friction checked IAW R44 M/M Chap 9.124 - WITHIN LIMITS. Coning Hinge Shim calculation carried out IAW R44 M/M 9.123 - Shims required as per original shim set. New bolt PN NAS 634-105, RN SH 043543 S/S x 2 installed. Bolt stretch carried out IAW R44 M/N Chap 9.112 (new bolt stretched by 0.022") .003" gap measured Both coning hinges. Blade assemblies ON PN C005-12 Blade SN 4763 & 4786, RN SH 043545 - Skysales.	
17	All 4 Rod Ends on PCL's for MRH worn and require replacing :	Both PCL removed, length of & PCL measured. New rod ends installed - PN D173-3 x 4, RN SH 042862 Skysales, 1470 Rotor and Wing, 9047 Heliflite - PCL's re-fitted to head + secured.	
18	Post MRB Replacement Initial Ground Run + Track & Balance Required :	Initial Ground Run carried out. Blade track at idle checked within limits. Blade track at full throttle checked. Horizontal reflector blade required adjusting. PCL adjusted out by 1/2 a turn. Further ground run carried out. Track within limits + balance 0.02 @ 12:42. Awaiting flight test.	

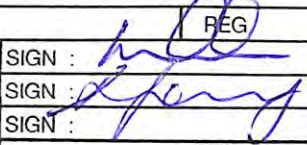
The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	SM Grainger	Sign		AmeL #	24612	Date	25/08/14
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P. Waterhouse
AMEL # 21299
Central Aero Engineering Ltd


Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	21/07/14	TYPE	R44 RI	REG	HBT	HRS	905.0	JOB #	3390	SHEETS	2 of 5	
ENGINEER NAME	P. Waterhouse	SIGN :					INITIALS :					
ENGINEER NAME	S.M. Grainger	SIGN :					INITIALS :					
ENGINEER NAME	K. Sami	SIGN :					INITIALS :					
ENGINEER NAME	H. Ross	SIGN :					INITIALS :					
									AMEL #	21299		
									AMEL #	24612		
									AMEL #	24894		
									AMEL #			

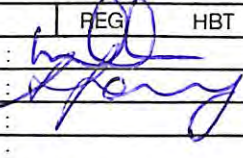
ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
9	Lycoming SI 1191A Cylinder compression Inspection due :	Inspection carried out IAW SI 1191A - See Item 2.	P. Waterhouse LAME Central Aero
10	Lycoming SI 1080C Maint items for special attention :	Inspection carried out IAW Lycoming - SI 1080C - NIL Faults.	P. Waterhouse
11	100 Hr / 12 Month ELT test / inspection due :	ELT test carried out IAW Rule Part 43 Appendix F and Kannad Installation & Maintenance manual. Self test carried out - NIL faults found.	P. Waterhouse
12	DCA / R44 / 29B - MRB bonding inspection due :	Inspection carried out IAW AD instructions - Refer Item 15 - For Work carried out.	P. Waterhouse
13	DCA / R44 / 27A Cabin door hinge security inspection due :	Inspection carried out IAW AD instructions - NIL faults found.	P. Waterhouse
14	Air Filter replacement 100 Hr due :	Air Filter replaced with PN 42097, RN 14311 - Av Parts.	P. Waterhouse
15	Engine Oil Filter change 100 Hr due :	Oil Filter replaced with PN AA48108, RN 605210, SAP.	P. Waterhouse

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	SM Grainger	Sign		Amel #	24612	Date	25/08/14
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Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	21/07/14	TYPE	R44 RI	REG	HBT	HRS	905.0	JOB #	3390	SHEETS	
ENGINEER NAME	P. Waterhouse	SIGN :				INITIALS :		AMEL #	21299	P. Waterhouse LAME Central Aero	
ENGINEER NAME	S.M. Grainger	SIGN :				INITIALS :		AMEL #	24612		
ENGINEER NAME	K. Sami	SIGN :				INITIALS :		AMEL #	24894		
ENGINEER NAME	H. Ross	SIGN :				INITIALS :		AMEL #			

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
1	100 Hr Inspection due :	100 Hr Inspection carried out IAW Robinson R44 Maintenance Manual Section 2 410. Inspection carried out IAW Lycoming 0-540 Operators Handbook Section 4.	P.W.
2	Engine leak down inspection due :	As follows: 1. 80 / 78, 2. 80 / 76, 3. 80 / 76, 4. 80 / 72, 5. 80 / 74, 6. 80 / 74.	S.M.G.
3	Lycoming SB 366B Carburettor throttle body screw inspection due :	Inspection carried out IAW Lycoming SB 366B - NIL Faults.	K.S.
4	Lycoming SB 480E Oil + Filter change due :	Filter replacement and oil change carried out during 100 Hr inspection.	H.R.
5	TCM SB643B Maintenance intervals for all TCM & Bendix Magneto's due :	Checked for Compliance - Satisfactory.	S.M.G.
6	TCM SB 658 Distributor gear maint due :	Carried out IAW SB 658 - Checked for Compliance -Satis.	S.M.G.
7	TCM SB663A Two wire magneto tacho breaker.	Carried out IAW SB 663A - Checked for Compliance - Satis.	S.M.G.
8	Lycoming SI 1129B Methods of checking DC Alternator & generator belt tension.	Inspection carried out IAW Lycoming SI 1129 - NIL Faults.	S.M.G.

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	SM Grainger	Sign		Amel #	24612	Date	25/08/14
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Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

P. Waterhouse
LAME / 1
Central Aero

DATE	27/11/14	TYPE	R44 Raven	REG	HBT	HRS	934.9	JOB #	3463	SHEETS	1 of 1
ENGINEER NAME	P. Waterhouse	SIGN :				INITIALS :			AMEL #	21299	
ENGINEER NAME	S.M. Grainger	SIGN :				INITIALS :			AMEL #	24612	
ENGINEER NAME	K. Sami	SIGN :				INITIALS :			AMEL #	24894	
ENGINEER NAME	H. Ross	SIGN :				INITIALS :			AMEL #		

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
1	R/H Magneto due DCA/ELECT/51B 4 Year expires :	R/H Magneto 500 Hr Inspection carried out IAW DCA/ELECT/51B - Magneto re-fitted on Central Aero Electrical Fm 1 # 14358.	
2	Annual First Aid Kit Inspection due :	First Aid kit Inspection carried out - expired items replaced Panadol & 4 x gauze pads. Now SATIS.	
3	4 month Oil + Filter change due :	Oil changed & replenished with Phillips AW100, RN 15585, Filter PN AA48110-2, RN 605898.	
4	Rocker drain tubes leaking R/H side :	Tube clips tightened - now SATIS - engine cleaned.	
5	Chip Plugs Inspection due :	Chip Plugs Inspection carried out - SATIS - Re-fitted + Lock wired.	
6	Ground Run Required :	Ground Run carried out post maintenance - Mag drops <50 RPM - SATIS.	
7	Review of Airworthiness due :	Review of Airworthiness carried out using CAA form 24066/07 & emailed to CAA. Original filed on this job number with Central Aero Engineering.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / ~~component~~ is released to service.

Name	P. Waterhouse	Sign		Amel #	21299	Date	28/11/14
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SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward		880 40					
1-3-14	17						<u>5</u> Loose Leaf Log Entry attached
5-3	9						In <u>3390</u> Date <u>25-8-14</u>
12-3	8						
20-3	5						Name <u>S. Grainger</u> No. <u>24612</u>
25-3	7						
28-3	12						100 hr Inspection
29-3	10						100 hr / 12 mth ELT
10-4-14	16						
12-4	9						
18-4	8						
22-4	12						<u>1</u> Loose Leaf Log Entry attached
28-4	8						In <u>3463</u> Date <u>27-11-2014</u>
30-4	18						Name <u>P. Watchman</u> No. <u>21299</u>
2-5-14	38						12 mth Oil + Filter Change
10-5-	9						Review of Airworthiness
15-5	16						
20-5	10						
24-5	12						
27-5	17						
29-6-14	15						
30-6	8						
16-7-14	9	905	00				
26-8	11						
29-8	14						
30-8	8						
2-9	7	909	20				
Total Carry Forward		909	20				



Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	12/03/14	TYPE	R44	REG	MBT	HRS	JOB #	3321	SHEETS	1 of 1
ENGINEER NAME	P. Waterhouse	SIGN :				INITIALS :			AMEL #	21299
ENGINEER NAME	S.M. Grainger	SIGN :				INITIALS :			AMEL #	24612
ENGINEER NAME	K. Sami	SIGN :				INITIALS :			AMEL #	24894
ENGINEER NAME	H. Ross	SIGN :				INITIALS :			AMEL #	

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
1	Operator reports Tail Rotor defect :	Travel 31.8 Km's to site to Inspect Tail Rotor Blade defect. Detailed Inspection carried out, Bond line suspect, Tail Rotor removed. Bench Inspection carried out, bond line remains suspect & surface corrosion requires removal. Tail Rotor Blades sent to Rotor and Wing for further Inspection. Blades inspected, found satis, corrosion removed, repainted refer form 1 # 5295. Tail Rotor Hub found to have corrosion. Tail Rotor Hub glass beaded, alodined & repainted.	
		Tail Rotor Hub & Blades re-assembled, Static balance carried out, corrosion inhibitor applied to spacers.	
		Travel to Candy Road - 31.8 Km's, re-fit Tail Rotor, carried out Dynamic Balance @ .15 IPS in strong X wind - Satis.	
		Duplicate Inspection raised - Refer attached Certification.	
		Return travel & log entries carried out + courier.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	P. Waterhouse	Sign		Amel #	21299	Date	21/03/14
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Waterhouse
 IE / IA 21
 Aero Eng
 P. Waterhouse
 LAME / I
 Central Aero

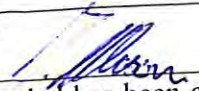
Log No.: 1586	Allison Avionics Ltd PO Box 76092, Northwood CHRISTCHURCH 8548 Telephone (03) 359-1204 www.allisonavionics.com	Aircraft/Component Make: Altitude Encoder
Aircraft Registration No.: ZK-HBT		Model: SSD120-30A
Date: 3 April 2014		Serial No.: A65252

The following work has been carried out on the above Aircraft/Component:

1. Tested IAW Manufacturer's Maintenance Manual.

COMPONENT REPLACEMENT DETAILS

Part Number	Description	Ser No. Off	Ser No. On	Form One No.

* MA Allison; Signature 	AME/Appr. No. 10012	Date 03/04/2014	Job Number MISC445	Sheet 1 of 1
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* The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft/component is released to service. Note: Release to service is subject to all (if any) operational limitations noted above.



Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	7/04/14	TYPE	R44 Raven	REG	HBT	HRS	884.8	JOB #	3334	SHEETS	1 of 1
ENGINEER NAME	P. Waterhouse	SIGN :				INITIALS :			AMEL #	21299	
ENGINEER NAME	S.M. Grainger	SIGN :				INITIALS :			AMEL #	24612	
ENGINEER NAME	K. Sami	SIGN :				INITIALS :			AMEL #	24894	
ENGINEER NAME	H. Ross	SIGN :				INITIALS :			AMEL #		
ITEM #	WORK REQUIRED			WORK CARRIED OUT							INITIALS
1	Operator Reports - Altitude Encoder Inoperable :			Fault find Encoder - Fault Confirmed.							
				Encoder SN A69810 removed - Unserviceable.							
				Replacement Encoder PN SSD 120-XXA, SN A65252 installed - Loose Leaf Log Entry attached # 1586.							
				Mode C output tested to 13,500 Ft - Ops Satis. Max error 40'.							
				Seat back re-installed.							
The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.											
Name	P. Waterhouse	Sign				Amel #	21299	Date	7/04/14		

p. Waterhouse
LAME / IA
Central Aero

SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward		834 10					
12-10-13	9						
16-10	11						
1-11-13	8						<u>1</u> Loose Leaf Log Entry attached
5-11	2						In <u>3321</u> Date <u>213-2011</u>
8-11	20						Name <u>P. Waterhouse</u> No. <u>21299</u>
18-11	25						
9-11	6						
12-11	7						Tail Rotor Defect
22-11	45						
23-11	36						
24-11	32						<u>2</u> Loose Leaf Log Entry attached
25-11	38						In <u>3334</u> Date <u>7-4-2011</u>
27-11	12						Name <u>P. Waterhouse</u> No. <u>21299</u>
8-12-13	12						
11-12	13						
13-12	14						Altitude Encoder Fault
15-12	10						
20-12	21						
22-12	16						<u>1</u> Loose Leaf Log Entry attached
27-12	8						In <u>3321</u> Date <u>215-4</u>
10-2-14	2						Name <u>P. Waterhouse</u> No. <u>21299</u>
19-2	10						
22-2	8						
23-2	10 00						
25-2	16						
27-2	10						
Total Carry Forward		880	40				



ZU-HBT.

certify that an Annual / ~~Bi-Annual~~ Review of
worthiness has been carried out on this aircraft and
that the requirements of Civil Aviation Rule Part
4.153(a) have been complied with using form CAA
4066 Current Revision.

Name Paul Waterhouse Next ARA Due ..7..11.....14..

no IA-21299

signed 

Date 7-11-13



Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

P. ✓
LAME / ir.
Central Aero Eng

DATE	10/02/14	TYPE	R44	REG	HBT	HRS	868.4	JOB #	3294	SHEETS	1 of 1	
ENGINEER NAME	P. Waterhouse	SIGN :					INITIALS :					
ENGINEER NAME	S.M. Grainger	SIGN :					INITIALS :					
ENGINEER NAME	K. Sami	SIGN :					INITIALS :					
ENGINEER NAME	H. Ross	SIGN :					INITIALS :					
AMEL #												
AMEL #											21299	
AMEL #											24612	
AMEL #											24894	
AMEL #												
ITEM #	WORK REQUIRED				WORK CARRIED OUT				INITIALS			
1	DCA / R44 / 30 (SB-78) requires embodiment :				Bladder Fuel Tank Installation carried out using RHC Kit PN KI-196, RN 1431 - (R & W). Weight & Balance data updated.				PW			
2	4 Month Oil + Filter Change due :				4 Month Oil + Filter Change carried out - Replenished with 9 Qts Phillips AW100 Oil, RN 13783. Oil Filter changed - PN AA48108-2, RN 607095, Superior. Covers re-fitted.				PW			
3	SB72A - Main Rotor Blade Inspection due :				Main Rotor Blade Inspection carried out - Satisfactory.				PW			
4	SB86 - MX Tacho Magnets Inspection due :				MX Tacho Magnets Inspection carried out - Satisfactory.				PW			
5	SL45 - Lockwire check due :				Lockwire check carried out - found embodied.				PW			
6	SL46 - Air Filter Raised :				Noted for next 100 Hour.				PW			
7	Ground run required :				Ground run carried out for 10 Minutes @ Full Throttle - Ops Satisfactory.				PW			
The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.												
Name	P. Waterhouse	Sign					Amel #	21299	Date	18/02/14		



Central Aero Engineering Ltd

Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

Central Aero Engineering
LAME / IA 21299

DATE	6/11/13	TYPE	R44 RI	REG	HBT	HRS	837.1	JOB #	3239	SHEETS	1 of 2
ENGINEER NAME	P. Waterhouse	SIGN :	<i>[Signature]</i>	INITIALS :	<i>[Signature]</i>	AMEL #	21299				
ENGINEER NAME	S.M. Grainger	SIGN :	<i>[Signature]</i>	INITIALS :	<i>[Signature]</i>	AMEL #	24612				
ENGINEER NAME	K. Sami	SIGN :	<i>[Signature]</i>	INITIALS :		AMEL #	24894				
ENGINEER NAME	H. Ross	SIGN :		INITIALS :		AMEL #					
ITEM #	WORK REQUIRED	WORK CARRIED OUT								INITIALS	
1	4 Month Oil change due :	Oil & Filter change carried out IAW Lycoming SB 480E - NIL faults. Filter PN AA48108-2, RN 604095 / Oil AW100, RN 13299.								<i>[Signature]</i>	
2	50 Hour Inspection due :	50 Hour Inspection carried out IAW 0-540 Lycoming operators hand book Section 4.								<i>[Signature]</i>	
3	24 Month Avionics Inspection due :	24 Month Inspection carried out IAW Part 43 Appendix B,D,E and using Central Aero Engineering inspection form. to 14000'								<i>[Signature]</i>	
4	ELT due battery change (finite life) :	ELT removed - PN 51821502-02, SN 2616550-0042. ELT installed - PN 51821502-02, SN 2619125-0045, RN form one 16542 Aviation Safety. Battery now to expire 12/2019. Self test carried out - NIL faults.								<i>[Signature]</i>	
5	Annual inspection of T/R & main Transmission chip plugs :	Chip detector inspected IAW RIHC R44 maintenance manual, Chapter 1.115. NIL faults found. Self test carried out.								<i>[Signature]</i>	
6	First Aid kit due inspection :	First Aid kit inspected. Satisfactory - Expiry now 6-11-14.								<i>[Signature]</i>	
7	Review of Air Worthiness due :	Review of Airworthiness carried out using CAA 24066/07 form. Electronic copy sent to CAA and hard copy kept on file at Central Aero Engineering site. Expiry now 5/11/2014.								<i>[Signature]</i>	
8	Post maintenance ground run required :	Ground run carried out - Satisfactory - NIL leaks.								<i>[Signature]</i>	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	SM Grainger	Sign	<i>[Signature]</i>	Amel #	24612	Date	7/11/13
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SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward		800 60					2 Loose Leaf Log Entry attached In <u>3239</u> Date <u>7-11-13</u> Name <u>Matthews</u> No. <u>21299</u>
26-5-13	19						
27-5	20						
28-5	19						
2-6-13	8						
12-6	12						
14-6	11						
15-6	8						
18-6	10						
20-6	12						
22-6	15						
1-7-13	10						
7-7-13	45						
25-7	16						
3-7	18						
2-8-13	12						
9-8	2						
12-8	11						
15-8	7						
18-8	12						
20-8	8						
2-9-13	18						
12-9	18						
22-9	10						
2-10-13	7						
4-10	6						
8-10	9						
Total Carry Forward		834 10					

50 hr Insp / Avionics / 4mth oil change

1 Loose Leaf Log Entry attached
In 3291 Date 18-2-2014
Name P. Waterhouse No. 21299

4 mth oil change / Bladder Fuel Tank Installation

Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry - CAE 2 rev 1

DATE	23/05/2013	TYPE	Robinson R44 Raven 1	REG	HBT	HRS	800.6	JOB #	3101	SHEETS	3 OF 4
ENGINEER NAME	S M.Grainger	SIGN		INITIALS				AMEL #	24612		
ENGINEER NAME	P Waterhouse	SIGN		INITIALS				AMEL #	21299		
ENGINEER NAME		SIGN		INITIALS				AMEL #			
ENGINEER NAME		SIGN		INITIALS				AMEL #			
ITEM #	WORK REQUIRED			WORK CARRIED OUT							INITIALS
20	All engine sparkplugs worn to limits.			All sparkplugs replaced. 3x UREM38E R/N 10952 Avparts, 9 x UREM38E R/N 12047 AvParts.							
21	CHT ops erratic.			CHT probe removed and tested .Temporarily refitted and checked sysytem with heat gun.Ops checked satis.Probe threads cleaned in head and on probe. Probe refitted and replacement lockwasher fitted.Nuts refitted to probe and locked with loctite.							
22	Corrosion noted on rotating half of swash plate .			Corrosion removed and surface cleaned and primed with zinc phosphate . Top coated with grey laquer.							
23	One MRB requires paint touch up at station at MR station 62.			Area to be painted sanded to feather edges,Area masked and primed with two pot primer.Area lightly sanded and top coated in two pot matt black . SB 72A inspection lines reapplied.							
24	Danger decal on r/h side of vertical stabiliser torn.Requires replacing.			Old decal removed and replacement item fitted.P/N C654-2 R/N SH033386 SkySales.							
25	Hyraulic fluid resivoir requires topping up.			Resivoir topped up to centre of sight glass.							
26	Main transmission requires topping up.			Swepco 90 oil topped up to centre of sightglass.							
27	Corrosion on rear frame tail boom lugs.			Corrosion removed ,painted in PA10 ,Top coated in grey enamel.							

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	S M.Grainger	Sign		Amel #	24612	Date	23/05/2013
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P Waterhouse
 AMEL #
 Central Aero

Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

CAE 2 rev 1

DATE	21/08/2012	TYPE	Robinson R44 R1	REG	HBT	HRS	800.6	JOB #	3101	SHEETS	2 OF 4
ENGINEER NAME	S M.Grainger	SIGN		INITIALS		AMEL #	24612				
ENGINEER NAME	P Waterhouse	SIGN		INITIALS		AMEL #	21299				
ENGINEER NAME		SIGN		INITIALS		AMEL #					
ITEM #	WORK REQUIRED			WORK CARRIED OUT						INITIALS	
11	L/h magneto requires retiming.			L/h magneto retimed to 25DBTDC.							
12	100hr/12 month elt test/inspection.			Elt test carried out iaw Rule Part43 Appendix F and Kannad Installation and maintenance manual. Self test carried out. Nil faults found.							
13	DCA/R44/29A MRB bonding inspection due.			Inspection carried out iaw AD instructions and nil faults found.							
14	DCA/R44/27A Cabin door hinge security inspection.			Inspection carried out iaw AD instructions and nil faults found. 2X Door retaining rings P/N B427-1 installed.							
15	Lyc SB 388C Exhaust valve guide condition inspection.			Inspection carried out iaw SB instructions as follows: 1/0.011 2/ 0.015 3/ 0.025 4/ 0.015 5/0.015 6/0.020							
16	Cable ties broken on engine loan due to age.			Ties replaced as required.							
17	RHC SB72A MRB bond line inspection due.			Inspection carried out iaw SB instructions [DCA/R44/29A] Nil faults found. Techlog annotated that inspection now due also at every 4 months.							
18	Airfilter due replacement [100hr]			Filter replaced P/N 42097 R/N 11076							
19	Engine oil filter due change. [100hr]			Oil filter replaced P/N AA48108-2 R/n 13112 SAP							

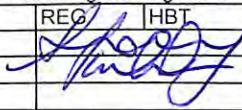
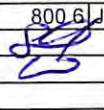

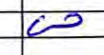
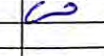
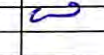
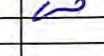
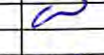
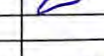
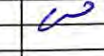

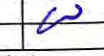
The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	S M.Grainger	Sign		Amel #	24612	Date	23/05/2013
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Central

Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

CAE 2 rev 1

DATE	23/05/2013	TYPE	Robinson R44 R1	REG	HBT	HRS	8006 JOB #	3101	SHEETS	1 OF 4
ENGINEER NAME	S M.Grainger	SIGN				INITIALS			AMEL #	24612
ENGINEER NAME	P Waterhouse	SIGN				INITIALS			AMEL #	21299
ENGINEER NAME		SIGN				INITIALS			AMEL #	
ITEM #	WORK REQUIRED			WORK CARRIED OUT						INITIALS
1	Helicopter due 100hr inspection.			Inspection carried out iaw Robinson R44 M/M Section 2.410 . Engine 100hr inspection carried iaw Lycoming O-540 Operators manual Section 4.						
2	Engine leakdown inspection due.			As follows:1/75/80/2/ 72/80 3/72/80 4/ 74/80 5/ 72/80 6/ 70/80						
3	Lycoming SB 366B Carburettor throttle body screw inspection.			Inspection carried out .Nil faults						
4	Lycoming SB 480E Oil and filter change .			Filter replacement and oil change carried out during 100hr inspection. Oil RN 11780 Filter RN 13112.						
5	TCM SB643B Maint intervals for all TCM & Bendix magneto's.			Not due at this visit.						
6	TCM SB 658 Distributor gear maint.			Carried out as above.						
7	TCM SB663A Two wire magneto tacho breaker.			Carried out as above.						
8	Lycoming SI 1129B Methods of checking dc alternator and generator belt tension.			Inspection carried out .Nil faults found.						
9	Lycoming SI 1191A Cylinder compression.			Carried out see item 2						
10	Lycoming SI1080C Maint items for special attention.			Inspection carried out ,nil faults found.						

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Na

Name	S M.Grainger	Sign		Amel #	24612	Date	23/05/2013
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SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log		
	Daily Total	Since Manufacture	Recorder Reading						
	Hours	Hours	Hours						
Total Brought Forward		767	50						
15-2-13	7								
24-2	28								
24-2	11								
30-3-13	45								
22-3-13	12								
28-3	18								
30-3	18								
1-4-13	10								
5-4	20								
7-4	16								
11-4	10								
12-4	10								
13-4	16								
20-4	18								
24-4	16								
4-5	5								
9-5	5								
16-5	63								
21-5	3	800	60						
Total Carry Forward		800	60						

4 Loose Leaf Log Entry attached
 In 3101 Date 23-5-2013
 Name S. Carter No. 24602
100 Hz inspection

1 Loose Leaf Log Entry attached
 In 3208 Date 17-9-2013
 Name P. Waterhouse No. 21299

SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward		722	30				
1-11-12	1	2					
5-11	5						
7-11	2	7					
10-11	1	8					
12-11	1	1					
15-11	9						
19-11	1	5					
20-11	4	5					
24-11	2	4					
8-12	8						
9-12	2	0					
10-12	1	8					
15-12	1	6					
17-12	1	6					
20-12	1	8					
22-12	1	0					
29-12	8						
2-1-13	9						
17-1	1	5					
19-1	8						
22-1	6	3					
24-1	2	8					
27-1	1	8					
1-2-13	3	5					
11-2	1	6					
12-2	9						
Total Carry Forward		767	50				

SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward		688	10				
10-7-12	5						
14-7	6						
18-7	8						
25-7	9						
30-7	47						
3-8-12	25						
6-8	20	700	70				
23-8	16						
23-8	8						
24-8	19						
26-8	10						
29-8	8						
30-8	4						
11-9-12	8						
19-9	16						
21-9	8						
22-9	16						
23-9	9						
27-9	19						
29-9	8						
30-9	8						
7-10-12	11						
15-10	10						
20-10	5						
25-10	22						
26-10	7						
Total Carry Forward		722	30				

I certify that an Annual / ~~Bi-Annual~~ Review of Airworthiness has been carried out on this aircraft and that the requirements of Civil Aviation Rule Part 43.153(a) have been complied with using form CAA 24066 Current Revision.

Next ARA Due 19-12-13

Name Stephen Grainger

No IA - 24612

Signed *[Signature]*

Date 24-1-2013

Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

DATE	24/01/2013	TYPE	Robinson R44 R1	REG	HBT	HRS	757	JOB #	2132	SHEETS	1 OF 1
ENGINEER NAME	S M Grainger		SIGN			INITIALS			AMEL #	24612	
ENGINEER NAME			SIGN			INITIALS			AMEL #		
ENGINEER NAME			SIGN			INITIALS			AMEL #		
ITEM #	WORK REQUIRED			WORK CARRIED OUT							INITIALS
1	50hr inspection due.			50 hr inspection carried out iaw Lycoming operators amd maintenance handbook Section 4 for 0-540 Series engines 1x AA48110-2 Oil filter <i>Rp 603209</i> 9x Victory 100AW Oil <i>Rp 11137</i> . Ground run carried out Nil leaks							
2	4 Month oil filter /oil change due			Oil filter/oil changed during 50hr inspection.							
3	First Aid kit due annual inspection.			Kit inspected satis Now due 4-1-2014.							
4	Annual Airworthiness Review due.			review carried out using CAA Form 24066/07 Rev7 Jan 2011 Electronic copy sent to the CAA and a hard copy kept on file at Central Aero Engineering. Any discrepancies entered into airframe logbook.ARA expires 19-12-2013							
5	Induction gaskets on cylinders 1,3,4,5,6 require replacement due going brittle.			All induction clamps released,old gaskets removed from flanges. Replacement gaskets P/N 71973 X 5 R/N 603305 Superior. New locking washers installed.P/N MS 35333-40 X 10.							
6	CHT reported to be fluctuating in operation.			Fault traced to CHT probe inner post turning when wire moved. New item ordered P/N 3080-38 R/N SH030646 Flight line.Customer P/N S2334-3							
7	RHC SB 72A MRB 4 month inspection due.			Inspection carried out nil faults found.							

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Narr:

Name	S M.Grainger	Sign		Amel #	24612	Date	24/01/2013
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Central Aero Eng
LAME / IA
S. 2

S. C.
LAME / D.
Central Astro E.



First Aid Kit Inspection Certificate

Date	24/01/2013
ZK	HBT

Expires 4-1-2014

First Aid Kit inspection carried out & contents checked satisfactory

Name	S M. Grainger
AMEL#	24612
Signature	

... removed from flanges.

SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward		652 90					/ Loose Leaf Log Entry attached
11-1-12	1 8						In <u>2053</u> Date <u>16-10-12</u>
15-1-	2 6						Name SPORREASE No. <u>21299</u>
25-1	1 9						
30-1	7						
2-2-12	1 1						
4-2	7						
7-2	1 4						/ Loose Leaf Log Entry attached
17-2	2 1						In <u>2132</u> Date <u>24-1-2013</u>
20-2	2 0						Name SCAND No. <u>24612</u>
24-2	2 0						SOLID INSPECTION
28-2	2 3						ARA DUG
3-3-12	1 0						REP/R44/29A / SB 72A
8-3	1 8						
11-3	1 2						
12-3	1 7						
13-3	1 3						
14-3	1 0						
18-5	4						
20-6	2 4						
21-6	6						
22-6	9						
23-6	1 7						
29-6	1 3						
7-7	1 3						
8-7	6						
10-7	6						
Total Carry Forward		658 10					



AEROMOTIVE

AIRCRAFT ENGINEERING SPECIALISTS
STEELE ROAD, HAMILTON AIRPORT
RD2, HAMILTON 3282

PH 07 843 3199 FAX 07 843 6116

ISSUED UNDER AUTHORITY OF CIVIL AVIATION
DIVISION OF MINISTRY OF TRANSPORT
APPROVAL No MO 76794

FORM AM/GEN/313
ISSUE 12

A/C Type ROBINSON R44	Registration ZK-HBT	Engine Type Propeller Type	Engine S/N Propeller S/N
On Job No A-64978 The following work has been carried out on the above		Aircraft / Engine / Propeller	Issued at Hamilton

24 MONTH AVIONICS CHECKS DUE.

- RADIO STATION INSPECTION CARRIED OUT I.A.W. CAR 43, APPENDIX B. FOUND SATISFACTORY.
 - ALTIMETER SYSTEM TESTS & INSPECTION CARRIED OUT I.A.W. CAR 43, APPENDIX D. ALTIMETER SYSTEM TESTED TO 12,000 FT. FOUND SATISFACTORY.
 - TRANSPONDER TESTS & INSPECTION CARRIED OUT I.A.W. CAR 43, APPENDIX E. FOUND SATISFACTORY.
 - KANNAD 406AF ELT, S/N 2616550-0042, TESTED AND INSPECTED I.A.W. CAR 43, APPENDIX F AND KANNAD ELT INSTRUCTION 0139162N, REV.12. FOUND SATISFACTORY.
- ELT BATTERY EXPIRY DATE: 10/2013.

DCA/RAD/35B – MODE S & C TRANSPONDERS.

INSTRUCTIONS COMPLIED WITH. ENCODER TESTED AT 1,000 FT & 4,100 FT. RESULTS FOUND WITHIN LIMITS.

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the (aircraft) (component) is released to service.

Name: **A. SEUMANUTAF**

Signed: 

AMEL/APP No: **AM126**

Date: **23/02/2012**

NOTE: This certificate constitutes a log entry and must be affixed in appropriate logbook.

Central Aero Engineering



Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log En CAE 2 rev 1

DATE	4/01/2012	TYPE	R44Raven	REG	HBT	HRS	651.1	JOB #	1780	SHEETS	1 of 1
ENGINEER NAME	Waterhouse	SIGN				INITIALS			AMEL #	21299	
ENGINEER NAME		SIGN				INITIALS			AMEL #		
ENGINEER NAME		SIGN				INITIALS			AMEL #		
ITEM #		WORK REQUIRED				WORK CARRIED OUT					INITIALS
1	50hr inspection due					50hr inspection c/o IAW R44 maintenance programe. Oil changed AW 100 Rn 8151 Oil filter changed pn AA48110-2 Rn 601830					
2	First aid kit due inspection					First aid kit inspection c/o contents updated as required due expired items.					
3	Annual Review of Airworthiness due					Annual review of Airworthiness C/O ref separate certification attached to log.					

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

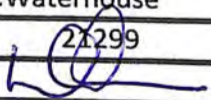
Name: Waterhouse Sign: Amel #: 21299 Date: 4/01/2012

First Aid Kit Inspection Certificate

Date	4/01/2012
ZK	HBT

Expires 4/01/2013

First Aid Kit inspection carried out & contents checked satisfactory

Name	P. Waterhouse
AMEL#	21299
Signature	

DATE	21/08/2012	TYPE	Robinson R44 R1	REG	HBT	HRS	7007	JOB #	1995	SHEETS	3 OF 4
ENGINEER NAME	S M.Grainger	SIGN		INITIALS						AMEL #	24612
ENGINEER NAME	K Sami	SIGN		INITIALS						AMEL #	24894
ENGINEER NAME	P Waterhouse	SIGN		INITIALS						AMEL #	21299
ITEM #	WORK REQUIRED			WORK CARRIED OUT							INITIALS
19	RHC SB84 Fuel cap placarding.			Cap marking already found carried out satis.							
20	RHC SB 57 Exhaust tailpipe extension inspection.			N/A this aircraft due nil extension fitted.							
21	Lower bearing C181-3 regrease due.			Regrease carried out aiw RHC R44 Maint manual Section 1.140 .Nil faults found.							
22	Owner requests aircraft battery change . Due down on start capacity.			Replacement battery installed P/N RG-25XC S/N 40515858 Release Note 8979 AvParts. Ground run carried out .Starts normal.							
23	Hydraulic powerpack requires fluid top up.			50 mls of Fluid 41 added .							
24	During 100hr inspection it was noted that there was corrosion around T.R gearbox attach ,on the horizontal stabiliser and at points along tail boom.			Horizontal stabiliser removed and corrosion removed by hand . Corrosion removed of tail boom by hand . Landing gear leg cuffs ,both forward items removed and corrosion removed. Underbelly inspection panels x 2 removed and corrosion removed by hand. All removed items sent to APS to be painted.Areas on main part of helicopter painted in hangar. Paint colour matched by APS. Removed items refitted and secured iaw RHC R44 M/M Section 1.330. Lower panels installed with nas 1515 nylon washers.							
25	Post 100hr ground run required.			As follows:QNH 1013[280FT +] ,OAT 19C,NR 100%,MAP 14.5",OIL PX 100PSI,OILTEMP 80F,CHT 250F,MAGS L/H <5% R/H<5%							
The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Na											
Name	S M.Grainger		Sign		Amel #	24612		Date	21/08/2012		

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Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

CAE 2 rev 1

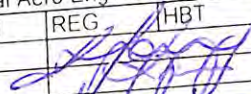

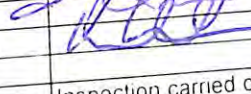
DATE	21/08/2012	TYPE	Robinson R44 R1	REG	FHT	HRS	700.7	JOB #	1995	SHEETS	2 OF 4
ENGINEER NAME	S M.Grainger	SIGN				INITIALS				AMEL #	24612
ENGINEER NAME	K Sami	SIGN				INITIALS				AMEL #	24894
ENGINEER NAME	P Waterhouse	SIGN				INITIALS				AMEL #	21299
ITEM #	WORK REQUIRED					WORK CARRIED OUT					INITIALS
11	Annual chip detector inspection due.					Inspection carried out iaw RHC M.M Section 1.115 .Nil faults found.					SP
12	100hr/12 month elt test/inspection.					Elt test carried out iaw Rule Part43 Appendix F and Kannad Installation and maintenance manual. Self test carried out. Nil faults found.					SP
13	DCA/R44/29A MRB bonding inspection due.					Inspection carried out iaw AD instructions and nil faults found.					SP
14	DCA/R44/27A Cabin door hinge security inspection.					Inspection carried out iaw AD instructions and nil faults found.					SP
15	DCA/ELECT/51B Due on I/h magneto. 500hr inspection.					Magneto P/N BL-600616-3 S/N E08GA060R removed for inspection. Magneto sent to Central Aero Electrical for inspection. Magneto refitted into original position .Release Cert 43612 Central Aero Electrical. Magneto retimed 25DBTDC. Ground run carried out satisfactory. See post 100hr ground run figures.					SP
16	RHC SB72A MRB bond line inspection due.					Inspection carried out iaw SB instructions[DCA/R44/29A] Nil faults found. Techlog annotated that inspection now due also at every 4 months.					SP
17	RHC SB82 Main rotor tx brake microswitch replacement.					Microswitch replaced iaw SB 82 instructions. P/N D049-4 R/N SHO25572 Skysales Aviation.					SP
18	RHC SB83 T/R Blades fatigue cracks.					Blades inspected and nil faults found .Flight manual sheet added per RHC instructions.					SP



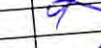
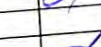

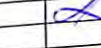

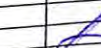
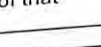

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Na

Name	S M.Grainger	Sign		Amel #	24612	Date	21/08/2012
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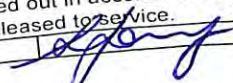
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Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

DATE	21/08/2012	TYPE	Robinson R44 R1	REG	HBT	HRS	7007	JOB #	1995	SHEETS	1 OF 4
ENGINEER NAME	S M. Grainger	SIGN		INITIALS						AMEL #	24612
ENGINEER NAME	K Sami	SIGN		INITIALS						AMEL #	24894
ENGINEER NAME	P Waterhouse	SIGN		INITIALS						AMEL #	21299

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
1	Helicopter due 100hr inspection	Inspection carried out iaw Robinson R44 M/M Section 2.410 Engine 100hr inspection carried iaw Lycoming O-540 Operators manual Section 4.	
2	Engine leakdown inspection due.	Leak down as follows > 1/ 74/80 2/ 74/80 3/ 72/80 4/ 72/80 5/ 79/80 6/ 72/80 .	
3	Lycoming SB 366B Carburettor throttle body screw inspection.	Inspection carried out .Nil faults	
4	Lycoming SB 480E Oil and filter change .	Filter replacement and oil change carried out during 100hr inspection.	
5	TCM SB643B Maint intervals for all TCM & Bendix magneto's.	Carried out L/H magneto removed for 500hr inspection.	
6	TCM SB 658 Distributor gear maint.	Carried out as above.	
7	TCM SB663A Two wire magneto tacho breaker.	Carried out as above.	
8	Lycoming SI 1129B Methods of checking dc alternator and generator belt tension.	Inspection carried out .Nil faults found.	
9	Lycoming SI 1191A Cylinder compression.	Carried out see item 2	
10	Lycoming SI1080C Maint items for special attention.	Inspection carried out .nil faults found.	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name: S M. Grainger Sign:  Amel #: 24612 Date: 21/08/2012

SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward		601.6					not 32 Loose Leaf Log Entry attached
31-8-11	17						In 1280 Date 4-1-12
3-9	19						Name <u>WATKINS</u> No. <u>2129</u>
4-9	10						
10-9	18						
17-9	10						
22-9	17						1 Loose Leaf Log Entry attached
27-9	27						In <u>AMO</u> Date <u>25-2-12</u>
30-9	22						Name <u>AMO</u> No. <u>AM126</u>
7-10	9						
11-10	10						
18-10	14						
23-10	15						
30-10	22						4 Loose Leaf Log Entry attached
3-11	5						In 1995 Date 21-8-2012
7-11	11						Name <u>SCORER</u> No. <u>24612</u>
13-11	15						100hr inspection due
17-11	9						12 MONTH CAP PLAN.
26-11	58						DELETED/SIB via MOP
37-11	30						CARRIED OUT @ 7000.7
17-12	22						
24-12	44						
25-12	10						
28-12	30						
3-1-12	18						
4-1	3						
6-1	18						
Total Carry Forward		652	90				

PCU REPLACED PIN° B 345-4 X2 RW° SH019486
FLIGHTLINE: SEE ITEM 19 FOR DUPLICATE SAFETY
INSPECTION

Crewed
Agency

24612

26-8-2011

1661

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Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

CAE 2 rev 1

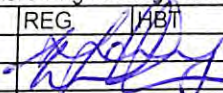
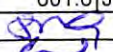










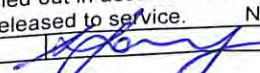
DATE	26/08/2011	TYPE	Robinson R44 R1	REG	MBT	HRS	601.6	JOB #	1661	SHEETS	3 OF 3
ENGINEER NAME	S M.Grainger	SIGN				INITIALS				AMEL #	24612
ENGINEER NAME	P Waterhouse	SIGN				INITIALS				AMEL #	21299
ENGINEER NAME		SIGN				INITIALS				AMEL #	
ITEM #	WORK REQUIRED										INITIALS
20	Small amounts of corrosion noted on main rotorhead .										✓
	Corrosion removed by abrasive method ,treated and reprotected abd painted in two part topcoat.										
21	Oil leak noted around lower cylinder drain tubes.										S.G.
	All drain tubes removed and inspected for condition .3 X Drain tube rubbers P/N STD-1821 installed.All other rubber tubes reinstalled and resecured.										
22	Engine induction gaskets found to be brittle and breaking away.All gaskets to be replaced.										S.G.
	All induction pipes removed as required and gaskets replaced with new items. All locking washers replaced.										
23	Repaired artficial horizon to be reinstalled.										S.G.
	Artifical horizon installed and powered up.A/H failed to operate and noted burning smell. A/H removed for further repair.										
24	Cell phone interface volume low.										✓
	Volume adjusted up as required.										
25	Engine cylinder leakage check due. 100 hr										✓
	Leak check as follows:1/ 75/80 2/ 70/80 3/ 75/80 4/ 68/80 5/72/80 6/ 74/80.										
26	Post 100hr ground run required.										✓
	Ground run as follows:PA -200FT,OAT 20C,OILPX100 PSI,OIL TEMP 80F,CHT220F. 100%NR MAP 14.5" MAGS L<5% R<5%.										

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name	S M.Grainger	Sign		Amel #	24612	Date	26/08/2011
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Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

CAE 2 rev 1

DATE	26/08/2011	TYPE	Robinson R44 R1	REG	ZBT	HRS	601.6	JOB #	1661	SHEETS	2 OF 3	
ENGINEER NAME	S M.Grainger	SIGN						INITIALS			AMEL #	24612
ENGINEER NAME	P Waterhouse	SIGN						INITIALS			AMEL #	21299
ENGINEER NAME		SIGN						INITIALS			AMEL #	
ITEM #	WORK REQUIRED			WORK CARRIED OUT						INITIALS		
10	DCA/R44/29 MRB bonding inspection due.			Inspection carried out iaw AD instructions. Nil faults found. Authority letter issued to pilot to carry out requirement 1 of AD. Certification sheet placed in Flight Manual.								
11	MRB require paint touch up at outer 6 "due to L/E erosion.			Blades repainted per instructions of SB72.								
12	Robinson SB 72 MRB inspection due.			Inspection carried out on MRB ,Nil faults found.								
13	Robinson SL 33 Overrunning clutch inspection due.			Inspection carried out during post maint ground run. Nil faults found.								
14	Robinson SB 79 Sprag clutch inspection.			N/A due to Revision H status of clutch installed.								
15	Lycoming SB 366,SI1080B,SI1129B due.			Inspections carried out nil faults found.								
16	TCM SB643B Due.			Inspection carried out .Nil faults found.								
17	Recowling inlet vane pulled away from attachment.			Vane refitted to cowl as required.								
18	Anti-skid tape to be applied to skids.			Tape fitted as required .								
19	Post tailrotor PCL change ,tailrotor balance to be carried out.			Tailrotor balance carried out and no adjustment required. Balancing equipment removed. Duplicate safety inspection carried .								
The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.												
Name	S M.Grainger	Sign						Amel #	24612	Date	26/08/2011	

Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

CAE 2 rev 1

DATE	26/08/2011	TYPE	Robinson R44 R1	REG	HBT	HRS	601.6	JOB #	1661	SHEETS	1 OF 3
ENGINEER NAME	S M. Grainger	SIGN		INITIALS		AMEL #	24612	AMEL #	21299	AMEL #	
ENGINEER NAME	P Waterhouse	SIGN		INITIALS		AMEL #		AMEL #		AMEL #	
ENGINEER NAME		SIGN		INITIALS		AMEL #		AMEL #		AMEL #	
ITEM #	WORK REQUIRED			WORK CARRIED OUT							INITIALS
1	100hr inspection due.			100hr inspection carried out iaw Robinson R44 m/m Section 2							
				100hr inspection carried out iaw Lycoming operators and maint manual							
2	100hr/12month Eit insp/test due.			Inspection carried out iaw Rule part 43 Appendix F and Kannad operators and installation instructions.							
				Self test function carried out satisfactory.							
3	Main rotor transmission and tail rotor gear box chip detectors due annual inspection.			Chip detectors removed and inspected iaw Robinson R44 m/m Section 1.115.							
				Nil faults found.							
4	500 hr main transmission and tail rotor gear box oil change due.			Oil drained and replenished with A257-2 Oil. Ground run carried out and oil level checked satis. Carried out iaw Robinson R44 m/m Sections 1.120 and 1.130.							
5	Flight control hydraulic filter due replacement.			Replacement filter installed .P/N AN6235-1A. Ground run carried out. Nil leaks noted.							
				Carried out iaw Robinson R44 m/m Section 1.170.							
6	300hr/12 month lower bearing lube due.			Clutch actuator lower bearing lube carried out iaw Robinson R44 m/m Section 1.140,							
7	Engine due 4 monthly oil change.			Oil change carried out during 100 hr inspection.							
8	100hr Helipod inspection due.			Inspection carried out on fixed items installed .Nil faults found. C/o iaw Chapter 5.1							
				PM011-HPR4411SLTL-25-007. Nil faults found.							
9	DCA/R44/26B MRB blade bonding insp to be cancelled.			DCA/R44/26B Cancelled DCA/R44/29 Refers.							

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Na

Name	S M. Grainger	Sign		Amel #	24612	Date	26/08/2011
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SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward		499 20					
27-12-10	5 8						<p><u>3</u> Loose Leaf Log Entry attached</p> <p>In <u>1661</u> Date <u>26-8-2011</u></p> <p>Name <u>S. Campbell</u> No. <u>2462</u></p> <p>100HR INSP DUIS 100/12 MONTH EST INSP TRANSMISSION + T/R GEARBOX OIL CHANGE HYDRAULIC FLUID CHANGE 100HR HELIFOD INSP DCP/R44/29 MRB BONDING DCP/R44/27A DOOR SECURITY INSP SB 72 MRB INSP SL 33 OVERRUNNING, CLUTCH</p> <p>TAIL ROTOR PCL REQUIRE CHANGE DUE TO WEAR.</p>
15-1-11	14 4						
5-2-11	8 9						
27	12 2						
15-3-11	7 9						
15-4-11	14 9						
10-5-11	10 9						
11-6-11	6 8						
18	2 2						
26	7						
28	20						
30	17						
1-7-11	5						
3	17						
5	13						
16	11						
17	17						
23	6						
26	16						
28	5						
30	21						
19-8-11	12						
20	5						
23	17						
		601	6				
Total Carry Forward		601	6				

Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

CAE 2 rev 1

DATE	17/03/2011	TYPE	Robinson R44 R1	REG	HBT	HRS	549.4	JOB #	1509	SHEETS	1 OF 1
ENGINEER NAME	S M.Grainger	SIGN				INITIALS	smg		AMEL #	24612	
ENGINEER NAME		SIGN				INITIALS			AMEL #		
ENGINEER NAME		SIGN				INITIALS			AMEL #		
ITEM #	WORK REQUIRED		WORK CARRIED OUT							INITIALS	
1	50 hr inspection due.		50hr inspection carried out iaw Lycoming O-540 Operators and Maintenance manual Section 4 .								
			1 x P/N AA48108-2 Oil filter..								
			8 Q X Phillips 100AW Oil.								
2	Artificial horizon U/S.		Central coaming lifted .								
			Plug removed from A/H and checked to see if power present.12 volts at plug.								
			A/H removed for repair.P/N 504-0006-954 S/N 208G005745 .								
			Blank installed in instrument panel and wiring stowed.Coaming relowered and secured.								

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name: S M.Grainger Sign: Amel #: 24612 Date: 17/03/2011

ENGINE CYLINDER COMPRESSIONS: 1/76/80 2/70/80
 3/73/80 4/75/80 5/80/80 6/76/80


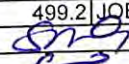

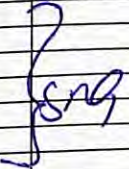

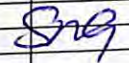



COPIED 24612 19-12-2010
[Signature]

~~Engineering~~
 S Grainger
 14/12/10 IA 24612
 Aero Engineering
 CPE

"I certify that an annual review of airworthiness has been carried out on this aircraft and that the requirements of Civil Aviation Rule Part 43.153(a) have been complied with"			
Name	Stephen M. Grainger		
Signature	<i>[Signature]</i>		
IA	24612	Date	19-12-10

EXPIRES 19-12-2011

Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry CAE 2 rev 1

DATE		TYPE		REG	HBT	HRS	499.2	JOB #	1421	SHEETS	3 of 3
19/12/2010		R44 Raven 1									
ENGINEER NAME		S M.Grainger	SIGN			INITIALS				AMEL #	24612
ENGINEER NAME		P Waterhouse	SIGN			INITIALS			AMEL #	21299	
ENGINEER NAME			SIGN			INITIALS			AMEL #		
ITEM #	WORK REQUIRED		WORK CARRIED OUT						INITIALS		
17	DCA/ELECT/51B Due.		L/h magneto removed P/N 10-600646-201 S/N E07FA189 Starter Vibrator removed P/N 10-176487-121 S/N CA36510 . Both sent to Central Aero Electrical for 500 hr inspection. Items same as above reinstalled post inspection on Release Cert 36510 Central Aero electrical.								
18	DCA/R44/23 Overrunning clutch insp.		Clutch assy removed from helicopter iaw Robinson R44 Maint manual 7.200-7.213 Clutch assy P/N C018-2 S/N 5224 Sent to Rotor and Wing for inspection. Clutch assy same as above returned from inspection and reinstalled . Clutch assy refilled iaw m/m 7.200-7.213 on Release Cert 4010 Rotor and Wing. Cooling fan balanced as required and adjusted to 0.05 @ 1230/ Balancing equipment removed and engine cowlings refitted.								
19	Lo rotor speed horn inop .		Horn assy replaced with serviceable item P/N B320-1 Release Cert 5251. Ops now satisfactory.								
20	DCA/ELECT/6C&3C Mag switch inspection test.		Ignition switch inspected and required replacement switch kit. P/N 10-357510 Release Cert 600597 Superior Air Parts. 6C Carried out, test found satis.								
21	MRB require tip paint work tidied up.		Area masked off and paint touched up as required. Small amount of corrosion removed from tail rotor hub. Area cleaned and reprotected and painted.								
22	Ground run post maint required.		Ground run as follows: NR 100%. 14" MAP, 250 FCHT, 175F OIL TEMP, OIL PX 110								
The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Date 19/12/2010											
Name	S M.Grainger		Sign			Amel #	24612		Date	19/12/2010	

DATE	19/12/2010	TYPE	R44 Raven 1	REG	HBT	HRS	499.2	JOB #	1421	SHEETS	2 of 3	
ENGINEER NAME	S M.Grainger	SIGN		INITIALS	SMG	AMEL #	24612	ENGINEER NAME	P Waterhouse	SIGN		
ENGINEER NAME		SIGN		INITIALS		AMEL #	21299	ENGINEER NAME		SIGN		
ITEM #	WORK REQUIRED									WORK CARRIED OUT		INITIALS
8	Annual MRGB and TRGB chip detectors due.			Chip detectors removed and no fault found								SMG
9	Robinson SB 74 MRGB input yoke nut torque check due.			Nut torque checked per instructions in SB .Nil fault found.								SMG
10	Robinson SB 72 MRB inspection.			Blades cleaned and tapping lines redrawn on underide of blade. Tap test carried out nil faults found.								SMG
11	Robinson SL 33 Overrun clutch run down check.			Run down check carried out.Nil faults found.								SMG
12	Robinson SB 57 Tailpipe inspection due.			Inspection carried out and nil faults found.								W
13	DCA/R44/27A Door security inspection			Inspection carried out nil faults found.								SMG
14	DCA/R44/26A MRB inspection.			Inspection carried .Nil faults found.								SMG
15	Robinson SB 77 Clutch actuator wiring inspection.			Inspection carried out per SB.Nil faults found.								SMG
16	100hr Helipod inspection due.			Helipod inspection carried out iaw Chapter 5.1 PMO11-HPR4411SLTL-25-007 ICA'S.Nil faults found.								SMG

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name S M.Grainger Sign Amel # 24612 Date 19/12/2010

Central

Engineering

Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry CAE 2 rev 1

DATE	19/12/2010	TYPE	R44 Raven 1	REG	HBT	HRS	499.2	JOB #	1421	SHEETS	1 of 3		
ENGINEER NAME	S M.Grainger	SIGN							INITIALS				
ENGINEER NAME	P Waterhouse	SIGN							INITIALS				24612
ENGINEER NAME		SIGN							INITIALS				21299
ITEM #	WORK REQUIRED			WORK CARRIED OUT							INITIALS		
1	100hr inspection due.			100hr inspection carried out iaw Robinson R44 Maint/manual Section 2. 100hr engine inspection carried out iaw Lycoming Operator manual section 4. Compressions as follows: 1/ 76/80 2/70/80 3/ 73/80 4/75/80 5/ 80/80 6/ 76/80									
2	Lycoming SB388C Exhaust valve inspect due.			Inspection carried out iaw Lycoming SB 388C and results as follows: 1/ 0.020 2/0.020 3/ 0.020 4/ 0.020 5/ 0.020 6/ 0.015									
3	Lycoming SB 366 .SI 1080B, SI 1129B due.			SB'S Carried out .Nil faults found.									
4	TCM SB 643B			Carried out nil faults found.									
5	Annual Review of Airworthiness due.			ARA carried out on J/N 1404. Electronic copy sent to CAA. Copy on file at Central Aero Engineering . Defects observed: AD'S to be assessed and entered E,FE,N/A .Now entered in Airwothiness Directive log. Manufacturers SB'S to be assessed .SB'S assessed and entered E,FE,N/A. CAA 2173 doesn't match logbook.Replacement CAA 2173 issued and placed in F/M Flight Manual Revision status incorrect.Correct revision status LOEP and applicable pages replaced.13-5-2009.									
6	First aid kit due annual inspection.			Annual inspection carried out .Expiry now 19-12-2011									
7	100hr/12month Elt test/inspection due.			Elt inspection carried out iaw Kannad operators and installation manual and Part 43 App F.Self test carried out satis factory.									

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Na

Name	S M.Grainger	Sign		Amel #	24612	Date	19/12/2010
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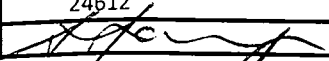


First Aid Kit Inspection Certificate

Date	20/12/2010
ZK	HBT

First Aid Kit inspection carried out & contents checked satisfactory

Expiry 20-12-2011

Name	S M.Grainger
AMEL#	24612
Signature	



DUPLICATE SAFETY INSPECTION

Form: HPF4
Rev: 2
Date: 27/5/10

168 Kitty Hawk Lane, Ardmore Airport,
Auckland, New Zealand
Ph: 09 299 9442 Fax: 09 299 9458

4771

ZK-HBT

1810

R44

Job Number

Registration

Serial Number

Aircraft Type

We certify that a duplicate safety inspection has been carried out and the identified control system of the aircraft / component functions correctly, and in respect of the maintenance performed, the control system is assembled and locked correctly. **P. Waterhouse**
LAME / IA 21
Central Aero Eng

System Components:

- Main rotor pitch link lock wiring

First Inspection

Z.Erdos

Name

Signature

14/7/10

Date

AMEL 69204

Authorisation Number

Second Inspection

S.Beams

Name

Signature

14/7/10

Date

AMEL 58141

Authorisation Number

**** FOR FULL DETAILS OF WORK CARRIED OUT REFER TO THE JOB SHEETS ****

14/7/10	4771	ZK-HBT	1810
Date	Job Number	Registration	Serial Number
R44	O-540-F1B5		
Aircraft Type	Engine Type	Serial Number	

THE FOLLOWING WORK HAS BEEN CARRIED OUT ON ZK-HBT @ 434.7 HOURS HOBBS

- Main rotor track and balance requested by owner Track and balance gear installed.
- Main rotor Track and balance carried out. Track adjusted for smooth flight, lateral balance found at 0.08 IPS @ 5:00
- Track and balance gear removed
- Duplicate inspection carried out

**** FOR THE FULL DETAILS OF WORK CARRIED OUT REFER TO THE JOB SHEETS ****

The maintenance recorded above has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft is released to service

Z.Erdos
Certifying Engineers Name



Signature

14/7/10
Date

AMEL 69204
Authorisation Number

FOR	STEER
000	000
045	045
090	090
135	134
180	180
225	224
270	270
315	315

COMPASS SWING
AIRCRAFT LOG BOOK CERTIFICATE

A/C REGISTRATION ZK_ HBT.
TYPE R44R.
COMPASS STD
BASE 1/10
REASON due.

DATE: 1/9/10

Signature: _____

SER. No _____

AMEL No 21299

EXPIRY: 1/9/12

P. Waterhouse
LAME / IA 21299
Central Aero Engineering
Waterhouse
1E / IA 21299
Aero Engineering

Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

CAE 2 rev 1

DATE	1/09/2010	TYPE	R44Raven	REG	HBT	HRS	449.5	JOB #	1333	SHEETS	1 of 1
ENGINEER NAME	Waterhouse	SIGN				INITIALS				AMEL #	21299
ENGINEER NAME	Grainger	SIGN				INITIALS				AMEL #	24612
ENGINEER NAME		SIGN				INITIALS				AMEL #	
ITEM #	WORK REQUIRED	WORK CARRIED OUT								INITIALS	
1	50Hr inspection due	50hr inspection c/o IAW Lycoming 540 series O&M sect 4. SI 1080C & SB480E c/o satisfactory. New oil filter installed Pn AA48108-2 Rn 4718 Oil replenished with Phillips AW100 Rn 5284									
		Engine side covers refitted.									
2	SB 72 due	SB72 MRB inspection c/o found satisfactory.									
3	Compass swing due	Compass swing c/o ref certification card attached to A/C log.									
4		Ground run c/o ops satis.									

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Na

Name	Waterhouse	Sign		Amel #	21299	Date	1/09/2010
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DATE	6/05/2010	TYPE	R44Raven	REG	HBT	HRS	399.8	JOB #	1251	SHEETS	1 of 1
ENGINEER NAME	Grainger	SIGN		INITIALS		AMEL #	24612	ENGINEER NAME	Waterhouse	SIGN	
ENGINEER NAME	Waterhouse	SIGN		INITIALS		AMEL #	21299	ENGINEER NAME		SIGN	
ENGINEER NAME		SIGN		INITIALS		AMEL #					

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
1	100 hr inspection due	100 hr inspection c/o IAW R44 MM & Lycoming 0540 M/M. Oil changed Phillips AW100 Rn 15195. Oil Filter Pn AA48110-2 Rn 4208. Air filter changed PN C771-1 Rn 4561. Leak downs 1 70 2 72 3 75 4 73 5 75 6 76 satis.	
2	100 hr/ Ann ELT Check due	100hr/ann ELT check c/o IAW Manufacturers instructions, ops satis.	
3	SL33 rundown check required	SL33 Clutch rundown check C/O ops satis.	
4	SB Compliance required	SI1080C, SB480C, SB366, SI1080B, SI1129B c/o.	
5	DCA/R44/26A & 27A due	DCA/R44/26A MRB insp c/o found satis. DCA/R44/27A Doors insp c/o found satis.	
6	Helipod inspection due	Helipod inspection c/o IAW ICA condition satis.	
7	Low rotor horn inop, light ops correct.	Fault find lo rotor warn horn, rectify wiring, refit ops now satis.	
8	Cell phone ops unsatisfactory	Cell phone repaired via HAM Avionics ref loose leaf log entry.	
9	#2 cyl priming line broken at cylinder fitting	Primer line re flared to rectify and refitted. Ops now satis.	
10	Ground run required	Ground run C/O 15*c, 1019Mb, 180*f OT, 260*f CHT, 108 psi OP 100%Nr, mags 4%. ops satis	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Na


Name	Grainger	Sign		Amel #	24612	Date	7/05/2010
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maintenance the aircraft / component is released to service. Na


Name	S M.Grainger	Sign		Amel #	24612	Date	11/02/2010
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Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

CAE 2 rev 1

DATE	17/05/2010	TYPE	R44 Rav 1	REG		HBT		HRS		JOB #	1258	SHEETS	1 OF 1
ENGINEER NAME	S M.Grainger	SIGN		INITIALS	SMG	AMEL #	24612						
ENGINEER NAME		SIGN		INITIALS		AMEL #							
ENGINEER NAME		SIGN		INITIALS		AMEL #							
ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS										
1	Starter ring gear has damaged teeth requires replacement.	Rear cowling and side cowls removed for access. Fan and scroll assy removed iaw R44 M/M 6.210 1-11. Ring gear removed iaw R44 M/M 7.291 A-G3. Fan and scroll assy refitted iaw R44 M/M 6.220 1-11. Ring gear P/N 72566 Release Cert 9465 Aeromotive. Rear cowling and side cowling refitted post ground runs.	SMG										
2	Replace crankshaft seal due to oil leakage.	While carrying out the above crankshaft seal assy replaced. P/N LW-11997	SMG										
3	Carry out cooling fan balance iaw R44 M/M 6.220 Item 12.	Balance carried out..2 ips.	SMG										
4	Starter removed for repair due to damage on drive gear teeth .	Starter removed for repair and sent to Central Aero Electrical for repair. P/N BC315-100-2 S/N 0907120928 OFF and refitted. Release Cert 20510 Central Aero Electrical.	SMG										
5	Carry out track and balance on M/R blades. Customer request.	M/R Blade track and balance not carried out at this visit.	SMG										

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Na

Name	S M.Grainger	Sign		Amel #	24612	Date	17/05/2010
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SECTION 3 MAINTENANCE RECORD

P. W...
LA...
ise
99

Form HAMS 2A
Issue 4

Date:- 6/05/2010

Hamilton Aero Maintenance Ltd
P.O.Box 11078
Hillcrest, Hamilton.

Approval # MO24076

Aircraft Registration:- ZK HBT

Job Number: 20531

Aircraft Model:- Robinson R44

Aircraft Serial Number:- 1810

The following work has been carried out:-

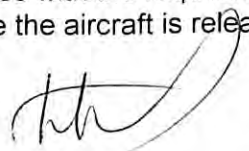
Cellphone reported low volume. Cellphone audio adjusted to max on south pacific interface box and cellphone handset, ground tested satis.

The Maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft is released to service.

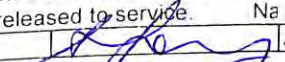
Authority: A 14728

Name: C. Law-Brown

Signed:



Completed Date: 6/05/2010

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.							
Name	S M Grainger	Sign		Amel #	24612	Date	17/05/2010

SECTION 2 SERVICE RECORD

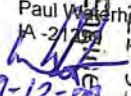
Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward		399.8					<p>1 Loose Leaf Log Entry attached In <u>1183</u> Date <u>11-2-2010</u> Name <u>CRANER</u> No. <u>24612</u> SOLE, CLUTCH ACTUATOR CUBE, HYDRAULIC RESERVOIR TOP UP</p>
							<p>1 Loose Leaf Log Entry attached In <u>1251</u> Date <u>7-5-10</u> Name <u>CRANER</u> No. <u>24612</u></p>
							<p>1 Loose Leaf Log Entry attached In <u>1258</u> Date <u>7-5-10</u> Name <u>CRANER</u> No. <u>24612</u></p>
Total Carry Forward							

2k - HBT.

LAMIA 21799

Central Aero Engines

I certify that an Annual Review of Airworthiness has been carried out on this aircraft and that the requirements of Civil Aviation Rule Part 43.153(a) have been complied with using form CAA 24065/07 Rev 3.

Name Paul Waterhouse
No JA-21799
Signed 
Date 19-12-09

P. Waterhouse
LAME / IA 21299
Central Aero Engineering



First Aid Kit Inspection Certificate

Date	10/12/2009
ZK	HBT

First Aid Kit inspection carried out & contents checked satisfactory

Name	S M. Grainger
AMEL#	24612
Signature	

Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry

CAE 2 rev 1

DATE	11/12/2009	TYPE	R44 RAV1	REG	HBT	HRS	304.8	JOB #	1120	SHEETS	
ENGINEER NAME	P Waterhouse	SIGN				INITIALS				AMEL #	21299
ENGINEER NAME	S M.Grainger	SIGN				INITIALS	SMG			AMEL #	24612
ENGINEER NAME		SIGN				INITIALS				AMEL #	
ITEM #	WORK REQUIRED						WORK CARRIED OUT				INITIALS
12	Gascolator kit requires install.			Gascoltaor Kit Pn KI155		installed IAW instructions Rn				W	
				Refuel A/C. Leak check satis.							
13	Aft Hyd servo brackett requires change			Hyd servo brackett changed Per SB 66						SMG	
14	Ground run required			100% Nr. 14" MP, 110 CP, 100F OT, 250CHT, 106 MRB						SMG	
15	DOA/R44/27A DUG			DOOR SECURITY ANSP C/O - SATS						W	
16	DOA/R44/26A DUG			MRB ANSP C/O - SATS						W	

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Na

Name	Waterhouse	Sign		Amel #	21299	Date	9/12/2009
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57171472129

P Waterhouse



Central Aero Engineering Ltd Miscellaneous Work Sheet & Loose Leaf Log Entry CAE 2 rev 1

DATE	11/12/2009	TYPE	R44 RAV1	REG	HBT	HRS	304.8	JOB #	1120	SHEETS	
ENGINEER NAME	P Waterhouse	SIGN		INITIALS						AMEL #	21299
ENGINEER NAME	S M.Grainger	SIGN		INITIALS						AMEL #	24612
ENGINEER NAME		SIGN		INITIALS						AMEL #	

LANZ 71A 2000

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
P. Waterhouse	1 300hr airframe and engine inspection due.	Airframe inspection carried out IAW Robinson R44 m/m schedule . Engine inspection carried out IAW Lycoming O-540 Operators and Maintenance manual. Oil filter replaced P/N AA48108-2 8 Qts Phillips 100aw oil.	PWG
	2 24 month avionics inspection due DCA/Rad/35B due	24 Month avionics insps c/o, transponder fails test. Xponder repaired 24 mth cert attached. DCA/Rad/35B c/o found satis.	W
	3 Transponder found to be outside limits on test.	Transponder repaired via SPA returned & refitted on SPA Fm1 62553	W
	4 24 month ELT inspection due.	24 mth ELT test & insp C/O IAW Kannad M/M. Satis refitted ref Cert attached	W
5	Annuals inspection due.	Annual inspections C/O, First Aid kit satis.	smg
6	Chip plugs manual inspection due	Ann Chip plugs insps c/o, found satis, refitted.	smg
7	Hydraulic filter replacement required.	Hydraulic filter changed Pn AN6235-1A Rn 3996. Hyd fluid topped up as required.	W
8	SB 57 Tail pipe inspection due.	SB 57 Tail pipe insp c/o, found satis.	W
9	Helipod inspection due	Helipods insps c/o IAW ICA, condition satis.	W
10	Annual Review of Airworthiness due	ARA C/O ref certification attached.	W
11	Install Fuel hose Kit KI194	Kit KI 194 installed IAW instructions. Flow check satis. W & Bal ammended.	W

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service. Na

Name	Waterhouse	Sign		Amel #	21299	Date	9/12/2009
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A/C Type ROBINSON R44	Registration ZK-HBT	Engine Type Propeller Type	Engine S/N Propeller S/N
On Job No AF-53323 The following work has been carried out on the above		Engine Aircraft Propeller	Issued at Hamilton

24 MONTH AVIONICS INSPECTIONS DUE.

- RADIO STATION INSPECTION CARRIED OUT I.A.W. PART 43, APPENDIX B. FOUND SATISFACTORY.
- ALTIMETER SYSTEM TESTS & INSPECTION CARRIED OUT I.A.W. PART 43, APPENDIX D. TESTED TO 15,000 FT. FOUND SATISFACTORY.
- ELT TEST & INSPECTION OF KANNAD 406AF, P/N S1821502-02, S/N 2616550-0042, CARRIED OUT I.A.W. PART 43, APPENDIX F. FOUND SATISFACTORY.
ELT BATTERY EXPIRY DATE: 10/2013.

NOTE: TRANSPONDER NOT TESTED SERVICEABLE AS PART OF THESE CHECKS.

DCA/RAD/35B – MODE S & C TRANSPONDERS.

TESTED TO 1,000 FT & 4,100 FT. RESULTS FOUND TO BE WITHIN LIMITS. SATISFACTORY.

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft is released to service.

Name: A. SEUMANUTAFA

Signed: 

AMEL/APP No: AM126

Date: 09/12/2009

NOTE: This certificate constitutes a log entry and must be affixed in appropriate logbook.



**Aeromotive
Limited**

HEAD OFFICE: STEELE ROAD, HAMILTON AIRPORT
TELEPHONE 07-843 3199 FACSIMILE 07-843 6116

POSTAL ADDRESS: RD2, HAMILTON, NEW ZEALAND

ISSUED UNDER AUTHORITY OF
CIVIL AVIATION DIVISION OF
MINISTRY OF TRANSPORT
APPROVAL No MO 12594

FORM AM/GEN/313
ISSUE 9

Central Aero Engineering

A/C Type ROBINSON R44	Registration ZK-HBT	Engine Type Propeller Type	Engine S/N Propeller S/N
On Job No AF-53323 The following work has been carried out on the above			Engine Aircraft Propeller
			Issued at Hamilton

24 MONTH TRANSPONDER INSPECTION DUE.

- REPAIRED TRANSPONDER, P/N 066-01156-0201, S/N 21205, "SOUTH PACIFIC AVIONICS" RELEASE CERT. NO. 62553, FITTED TO AIRCRAFT.
- 24 MONTH TRANSPONDER TEST & INSPECTION CARRIED OUT I.A.W. PART 43, APPENDIX E. FOUND SATISFACTORY.

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft is released to service.

Name: A. SEUMANUTAFU Signed:  AMEL/APP No: AM126 Date: 11/12/2009

NOTE: This certificate constitutes a log entry and must be affixed in appropriate logbook.

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft is released to service.

Name: A. SEUMANUTAFU Signed:  AMEL/APP No: AM126 Date: 09/12/2009

NOTE: This certificate constitutes a log entry and must be affixed in appropriate logbook.

SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward							
28-3-09	1 1						
2-4-09	1 4						
5-4-09	3 1						
13-4-09	2 6						
25	5 7						
3-5-09	4 0	203	4				
7	1 2						
17	1 4						
22	1 8						
31	3 6						
7-6-09	7 9						
13	1 5						
19	5 1						
2-7-09	2 3						
10	3 4						
18	3 2						
27	3 7						
4-8-09	3 8						
7	3 1						
17	2 1						
22	3 3						
30	3 3						
6-9-09	3 9						
12	5 2						
17	4 3						
1-10-09	2 4						
Total Carry Forward							

100hr inspection due
ICA/R44/26A MIR Blade insp

SECTION 2 SERVICE RECORD

Date	Time in Service						Cycle Recording	Flight Particulars & Unserviceability
	Daily Total		Since Manufacture		Recorder Reading			
	Hours	Minutes	Hours	Minutes	Hours	Minutes		
Total Brought Forward								
27-12-08	1	0						
29		8						
2-1-09	1	6						
4		8						
6	1	0						
7		2						
8		7						
9	1	2						
10		8						
12	1	7						
13		6						
15		5						
19	1	9						
21	1	9						
24	1	6						
25		7						
27	1	3						
2-3-09	1	7						
4-3	1	9						
7		8						
7	2	2						
13	1	9						
16	2	3						
20	1	8						
23	2	9						
27	2	1						
Total Carry Forward								

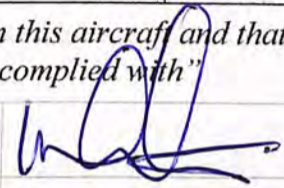
10. Certification (ARA cannot be certified with open defects)

ZK - HBT

"I certify that an annual review of airworthiness has been carried out on this aircraft and that the requirements of Civil Aviation Rule Part 43.153(a) have been complied with"

Name: P.WATERHOUSE

Signature:



IA/Authorisation No: 21299

Certification Date: 19-2-09

Date ARA next due: 19-2-10

Date review carried out
(for 30 day period):

Central Aero Engineering

LAME / IA 21299

P. Waterhouse



Heliflite Pacific Ltd

Form: HP03
Rev: 1
Date: 15/8/07

55 De Havilland Lane, Ardmore Airport, Auckland, NZ. Ph: 0~9~2999442 Fax: 0~9~2999458

Date: 18/8/09	Job Number: 3797	Registration: ZK-HBT	S/N: 1810
Aircraft Type: R44	Engine Type: O-540-F1B5	S/N: L-26776-40E	

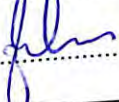
THE FOLLOWING WORK HAS BEEN CARRIED OUT ON ZK-HBT @ 248.4 HOURS ENGINE

- 50 HOUR ENGINE INSPECTION IAW LYCOMING O-540 OPERATORS MANUAL SECTION 4
- SATISFACTORY GROUND RUN

PARTS USED: 1 X CH48108-1 FILTER, 9 QTS W100 PLUS (REFER HELIFLITE PACIFIC RELEASE NOTE # 3797)

FOR FULL DETAILS OF WORK CARRIED OUT REFER TO THE JOB SHEETS

I hereby certify that the maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name ...Z.Erdos..... Signed  LAME No....69204..... Date....18/8/09.....

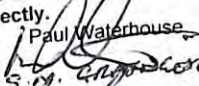
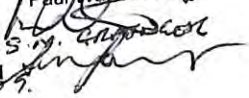
DATE	19/02/2009	TYPE	R44	REG	HB	HRS	JOB #	746	SHEETS	1 OF 1
ENGINEER NAME	S M.Grainger	SIGN							AMEL #	24612
ENGINEER NAME	P Waterhouse	SIGN							AMEL #	21299
ENGINEER NAME		SIGN							AMEL #	
ITEM #	WORK REQUIRED			WORK CARRIED OUT						INITIALS
1	Helicopter reported to have over speed rotor system up 113%			Main rotor and tail rotor dynamic balance checked and r no adjustment required						S.M.G.
	Helicopter required to have overspeed inspection carried iaw R44 M/M chap 2.540			Main rotor blades removed front from M/R hub assembly .Inspection carried on the condition of blade assemblies.Nil Faults found.						S.M.G.
				Oil drained from m/r pitch bearings and bearing condition checked.Nil faults found .						S.M.G.
				Pitch bearings refilled iaw R44 m/m chap 9.115.						S.M.G.
				Main rotor hub bolts mpi carried out r/n 30216 Aeromotive.						S.M.G.
				Main rotor blades refitted to hub assy iaw R44 m/m 9.112 1-15						S.M.G.
				Visual inspection carried out on the tail rotor blades nil fault found.						S.M.G.
				Run out check carried out on tailrotor drive shaft .iaw m/m 7.340.Runout within allowable limits of 0.025 [Act 0...005"]						S.M.G.
2	Engine to be removed for bulkstrip as per calculations determined in part c			Engine removed from airframe and reinstalled post bulkstrip iaw R44 m/m 6.110.						S.M.G.
				Ground run carried out post installation .Nil faults or leaks noted post engine run.						
				Flight test carried and the following figures recorded:						
				90 knots,MP 21.5,Eng rpm 103%,Oil temp 180 c ,CHT 350,OIL px 100 psi						
				Mag drop 50/50 .Rotor rpm 103						
				For duplicates see log book entry						

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Name P Waterhouse Sign  Amel # 21299 Date 19/02/2009

DATE 19/02/09 FROM SHAFT TO THROTTLE ARM.
4 CABLE TO MIXTURE ARM.
11 UPPER SWASHPLATE TO BLADE TIPS.

We certify that a duplicate safety inspection has been carried out and the identified control system of the aircraft / component functions correctly and, in respect of the maintenance performed, the control system is assembled and locked correctly.

1st part Name Paul Waterhouse Signed 
2nd part Name S.M.G. Signed 
Date 19-2-09

No AMEL/IA - 21299
SAC - 1028 GNZ - 3338
No 24612

SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward							
23-10-08	3						
24	1 4						19-7-09
25	4						QUOTESPEED #1SP.
28	2 3						
2-11-08	1 3						ARCA. ATTACHED ON TRAY
7	1 2						
8	2 4						
8	5						
11	1 1						
13	6						
15	3 0						
15	6						
16	4						
20	9						
29	1 5						
3-12-08	1 4						
5-12	2 0						
7	3 5						
10	1 8						
11	1 4						
12	3						
13	1 5						
14	6						
16	4						
19	1 2						
23	8						
Total Carry Forward							

CENTRAL AERO ENGINEERING MISCELLANEOUS WORK SHEET

CAE 2 rev 1

DATE	8/10/2008	TYPE	R44R	REG	HBT	HRS	100.1	JOB #	606	SHEETS	1
ENGINEER NAME	Waterhouse	SIGN		INITIALS						AMEL #	21299
ENGINEER NAME	Grainger	SIGN		INITIALS						AMEL #	24612
ENGINEER NAME		SIGN		INITIALS						AMEL #	

ITEM #	WORK REQUIRED	WORK CARRIED OUT	INITIALS
1	First 100 hr insp due	First 100 hr insp c/o IAW R44 M/M. <i>c/o done 10/24/08 Satis. W</i> <i>SBS 57 TAP PIPE TEST c/o Satis W</i>	W
2	Transmission oil changes due	Transmission oil changes c/o IAW R44M/M oil replenished with A257-2 Rn 225111	W
3	Chip plugs clean	Chip plugs inspected & cleaned & refitted	W
4	SB 388 C valve clearances required	SB 388C c/o all valve clearances found satisfactory, valve gear reassembled.	W
5	Air filter change req	Air filter changed Pn C771-1 RnHP0692	SMG
6	Oil filter change req	Oil filter insp c/o satis new filter Pn AA48108 Rn HAS2114	W
7	Oil change due	Oil drained & replenished with W100+ Rn 12664	W
8	A/H install required	Castleberry A/H installed Pn 504-0006-954 Sn 208605745 Rn SPA 12709 installed IAW R44 M/M & IPC, W& Bal changes made & updated in FM & logs Functional test c/o operation satis.	W
9	Install Helipods	L & R helipods installed IAW STC6/21E/11 Rn Helipod 3519. W & bal updated in FM & logs.	SMG
10	Ground run C/o	T/R chip light on, chip det checked satis refitted. Run c/o satis.	W
11	Hover check c/o	Hover check 21.5", 1005Mb, 110psi op, 170*f ot, 275*f CHT, 10A, 15*c Satis	W

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

Waterhouse	Amel #	21299	Date	30/09/2008	8-10-08 W
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SECTION 2 SERVICE RECORD

Date	Time in Service					Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture		Recorder Reading					
	Hours	Hours		Hours					
Total Brought Forward									
13-6-08	7 4								
14	0 8								
15	2 0								
19	2 9								
21-6-08	1 2								
17	0 9								
21-7-08	1 2								
12-8-08	2 5								
20	1 0								
21	1 5								
25	1 2								
31	0 6								
2-9-08	0 6								
17	1 4								
19	1 2								
22	1 1								
26	0 8								
30	1 1								
2-10-08	0 7	100	1	100	1				
9-10-08	3							100 HR	
14	1 5							TRANS OILS CHANGED	
15	1 0							O-CA/1044/26A	
19	1 1							A/B INSTALL	
19	5							HEATRODS INSTALL	
21	1 5							SR 57 TAIL PIPE	
22	6								
Total Carry Forward									

ENGINE ROUGH RUNNING UNABLE TO RESTART REFER ENG LOG BOOK J/N 657 CAR

SECTION 2 SERVICE RECORD

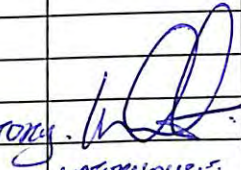
Date	Time in Service			Cycle Recording			Flight Particulars & Unservice
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Foward							
2-4-08	1 6						
7	1 3						
8	1 1						
10	2 9						
13	0 8						
16	1 7						
17	5 5						
21	2 5						
24	0 7						
23	1 1						
28	2 0						
2-5-08	1 3						
4	2 0						
6	1 0						
10	1 7						
11	2 0						
12	1 0						
12	1 9						
20	1 6						
27	1 2						
28	1 5						
29	1 8						
2-6-08	1 9						
3	1 2						
11	1 2						
12	1 3						
Total Carry Foward							

SECTION 2 SERVICE RECORD

Date	Time in Service			Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total	Since Manufacture	Recorder Reading				
	Hours	Hours	Hours				
Total Brought Forward							
1-2-08	5						
1-2-08	0						
4	0						
5	1						
7	1						
13	1						
14	1						
17	1						
19	0						
21	0						
27	1						
29	1						
3-3-08	1						
6	1						
9	1						
12	0						
14	0						
16	0						
16	0						
17	1						
19	0						
20	0						
25	1						
26	0						
28	1						
1-4-08	1						
Total Carry Forward							

HAMILTON

DCIA/R44/26A MRS INSPECTION c/o PART 1. SATISFACTORY.


WATERHOUSE

21299


13-2-08

331

CENTRAL AERO

HAMILTON.

29 HR TEST c/o FAW R44 m/s
CAB SN 383 REFERS DCIARS


WATERHOUSE

21299

26-3-08

383

CENTRAL AERO

Papakura, 1703

E-MAIL:

sales@avionics.co.nz

6. ITEM	7. DESCRIPTION	8. PART No.	9. ELIGIBILITY	10. QTY	11. SERIAL/BATCH No.	12. STATUS/WORK
1	AIRPATH COMPASS	C2400L4-B	Installer to Verify	1	RB00904	Repaired & Inspected

13. REMARKS

SERVICED I.A.W. COMPASS C2300-DL4 AIRPATH

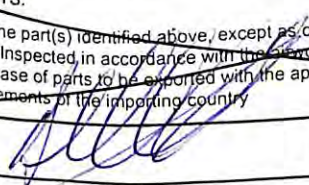
14. NEW PARTS:

Certifies that the part(s) identified above, except as otherwise specified in block 13, was (were) manufactured/inspected in accordance with the airworthiness regulations of the stated country and/or in the case of parts to be exported with the approved design data and with the notified special requirements of the importing country

15. USED PARTS:

Certifies that the work specified above, except as otherwise specified in block 13, was carried out in accordance with the airworthiness regulations of the stated country and in respect to the work the part(s) is(are) in condition for safe operation and considered ready for release to service (See below)

16. Signed



18. Date

18-Jan-08

19. CIVIL AVIATION AUTHORITY AUTHORISATION REFERENCE:

SUP / MO 34386

17. Name

Bruce Lister

AUTHORISATION No.:

SPA29557

CAA FORM ONE

Papakura, 1703

Auckland, New Zealand

e-mail sales@avionics.co.nz

Date: 14-Jan-08	Job No: 20801047
Aircraft Reg No: ZK-HBT	Aircraft Type: Robinson R44 Raven

The Following Work Has Been Carried Out:

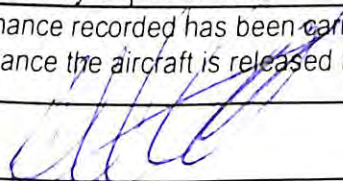
Item 1: KANNAD 406 AF P/N: S1821502-02 S/N: 2616550-0042. Defect Reported: Program 406Mhz ELT.
Carried out programming ELT with 15 Hex ID code. Code: C00C5681E8001A5. Faxed programming data sheet to Martec and Rescue Centre.

Item 2: Defect Reported: Raise 2129.
Raised new 2129 Aircraft Radio Station Equipment list.

Item 3: ELT CHECK Defect Reported: Carry out 12 month ELT inspection I.A.W. Part 43 App. F.
Carried out 12 Month / 100 Hour 406MHZ ELT Self Test Inspection I.A.W. Part 43 appendix F1 and 2.
ELT main battery expires: Oct-13

The maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft is released to service.

Signed:



Name:

Bruce Lister

Authorisation No. SPA29557

Date: 14-Jan-08

Heliflite Pacific Ltd

55 De Havilland Lane Ardmore Airport, Auckland, NZ. Ph: 0~9~2999442 Fax: 0~9~29995458

Date 21/01/08 Job Number 2139 Registration ZK-HBT S/N 1810 Aircraft Type R44 Raven I

We certify that a duplicate safety inspection has been carried out and the identified control system of the aircraft / component functions correctly, and in respect of the maintenance performed, the control system is assembled and locked correctly.

System Components: M/R Hub & Blades - Installation
T/R Blade Assy - Installation
Tail Boom - Installation
Intermediate Flex plate & Int. Tail Rotor Bellcrank - Installation

First Inspection

Name...B Griffin..... Signed ..... Licence No ...19727..... Date ...21/01/08.....

Second Inspection

Name...S Beams..... Signed ..... Licence No ...58141..... Date ...21/01/08.....

*** For full details of work carried out refer to the job sheets ***

Heliflite Pacific Ltd

55 De Havilland Lane, Ardmore Airport, Auckland. NZ. Ph: 0~9~2999442 Fax: 0~9~2999458

Date: 21/01/08

Job Number: 2139

Registration: ZK-HBT

S/N: 1810

Aircraft Type: R44 I

Engine Type: 0-540-F1B5

S/N: L-26776-40E

THE FOLLOWING WORK HAS BEEN CARRIED OUT ON ZK-HBT @ 4.0 HOURS AIRFRAME

- AIRCRAFT REASSEMBLED I.A.W. RHC R44 MAINTENANCE MANUAL SECTION 1.700
- MAIN ROTOR BLADE CONING FRICTIONS CHECKED AND FOUND TOO TIGHT, SHIMS ADJUSTED FOR PROPER CLEARANCE
- STAINLESS STEEL DATA PLATE FITTED
- SIGN WRITING C/O TO CURRENT CAA RULES
- 2129 & 2173 RAISED AND INSERTED INTO P.O.H.
- FIRST AID KIT SUPPLIED
- ENGINE FAN WHEEL BALANCE C/O 0.07 @ 3:20
- T/R BALANCE C/O 0.06 @ 1:33
- DUPLICATE INSPECTIONS CARRIED OUT. REFER TO SEPARATE LOG ENTRY
- SATISFACTORY FLIGHT CHECK C/O I.A.W. RHC R44 MAINTENANCE MANUAL SEC. 1.700
- COMPASS ADJUSTED FOR SOUTHERN DIP SPA 20801130
- COMPASS SWING CARRIED OUT I.A.W. AC43-7
- ALL RELEVANT CAA AD'S CHECKED FOR APPLICABILITY AND CERTIFIED IN LOG BOOKS
- DCA/GEN/27A COMPLIED WITH, ALL INTERIOR MATERIALS SUPPLIED BY AIRCRAFT MANUFACTURER

FOR FULL DETAILS OF WORK CARRIED OUT REFER TO THE JOB SHEETS

I hereby certify that the maintenance recorded has been carried out in accordance with the requirements of New Zealand Civil Aviation Rule Part 43 and in respect of that maintenance the aircraft / component is released to service.

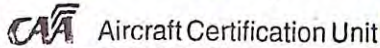

Name ...B.GRIFFIN.....

Signed *B.G.*.....

LAME No...19727....

Date.....21/01/08.....

SECTION 2 SERVICE RECORD

Date	Time in Service						Cycle Recording			Flight Particulars & Unserviceability Log
	Daily Total		Since Manufacture		Recorder Reading					
	Hours		Hours		Hours					
JAN '08			4.0		4.0					
Total Brought Forward										
							TIMES TRANSFERRED FROM U.S.A LOGBOOKS			
							Helicopter assembled see loose leaf entries Ref J/N 2139 Heliflite Pacific			
Jan 23	0	4	4	4	4	4	Test Flight			
<p>I have inspected Zk... <i>HBT</i> ... for the issue of an Airworthiness Certificate in the ... <i>STD</i> ... category in accordance with NZCAR Part 21 Subpart H</p> <p>Date <i>25/1/08</i> Signature <i>[Signature]</i></p> <p> </p>										
							Helicopter to be maintained IAW RHC m.m Section 1.101			
							DCA/R44/264			
							29 HR INSPECTION			
Total Carry Forward										

DATA PLATE DETAILS

AIRCRAFT

Nationality and Registration Marks: ZK- HBT
Make: ROBINSON
Model/Series: R44 RAVEN I
Serial Number: 1810
Date of Construction: 13th DECEMBER 2007
Constructor: ROBINSON HELICOPTER CO
Type Certificate Number: H11NM

ENGINE/S

Make: LYCOMING
Model/Series: O-540-F1B5 TC E-295

PROPELLER/S

Make:
Model/Series: