

AIRCRAFT TECHNICAL LOGS

Section 3. ENGINE

ENGINE LOG

- 1. Make TEXTRON LYCOMING
- 2. Model IO-540-AE1A5
- 3. Specification 1E4
- 4. Manufacturer's Serial Number L-32971-48E
- 5. Date of Manufacture MAR 3, 2008
- 6. Aircraft Inspection Cycle 50 HOUR

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD →			4	9	TSN TOTAL BROUGHT FORWARD FROM US LOGS

September 19, 2008 – R44 Raven II, S/N 12391, C-GGCX, ETSN 16.6 Hours.
 Aircraft delivered with FAA Export C of A No. E444409 via ferry flight from Robinson Helicopter Company for Importation Inspection at Madonna Helicopters Ltd. on W/O 42032.
 Aircraft historical records researched for importation, and an inspection carried out IAW CAR 507.07 Part (1) thru (5), and found to comply with TC TCDS H-97 Issue 6.
 New Canadian Logs opened and the current airframe and engine times were transcribed from previous US aircraft logs.
 All Dynamic Components were inspected as required IAW RHC R44 MM
 Refer to Aircraft Status Report for a detailed listing of Life Limited items and installed Airframe and Engine Components.
 All applicable Canadian, FAA, and Misc. Appliance Airworthiness Directives have been complied with to this date.
 A detailed listing of AD, SB compliance are recorded in the Aircraft Technical Logs
 Previously installed Canadian Registration Marks C-FUIC inspected for conformity to CAR 202.
 10/25/50 Hour Engine Insp. C/W IAW Lycoming IO-540 Series Ops Manual
 SI-1080C Maintenance Items for Special Insp. C/W
 Engine oil replaced – 9 litres of Phillips 20W-50M mineral oil installed.
 Engine oil filter replaced P/N CH48108-1 installed new
 Ground run & leak check C/W

Feb 13/09 Coho Helicopter Overhaul Ltd. WO# 3078
 A/C C-GGCX TAFH: 34.7 S/N 12391

Oil change carried out as per SB480E. Filter replaced and checked. Oil refilled with Phillips 20W-50M mineral oil. A/c run-up and checked for leaks.
 The maintenance described has been performed in accordance with the applicable standards of airworthiness. AMO 200-93 Signed: *[Signature]* 11220239

9 Jun 09 39 0 50 HR INSPECTION COMPLETED. 31 NO FAULTS AD 2008-14-07 FUEL INJ PLUG 'G' FOUND ON PLUG. AD CF90- THE MAINTENANCE DESCRIBED HAS BEEN PERFORMED IN ACCORDANCE WITH THE APPLICABLE STANDARDS OF AIRWORTHINESS. TRANSCRIBED BY A.M.O. 200-93 P. RUNOLFSON 129991

Oct 24/09 Coho Helicopter Overhaul Ltd. WO# 3172
 A/C C-GGCX TAFH: 43.7 S/N 12391

50 & 100hour inspections carried out as per Lycoming manuals.
 AD CF90-03R2 c/w muff heater no defects. SI 1080B c/w engine maintenance no defects.
 SB480E c/w oil system maintenance no defects. TCM SB658 c/w distributor maintenance no defects. TCM SB 636 c/w ignition switch no defects. TCM SB 643 c/w mag inspection no defects. TCM SB653 c/w hot mag test no defects. SB528 c/w mag maintenance no defects.
 SB515 c/w mag maintenance no defects. SB 342E c/w fuel injection lines no defects.
 AD 2008-14-07 c/w fuel injection lines no defects.

The maintenance described has been performed in accordance with the applicable standards of airworthiness. AMO 200-93 Signed: *[Signature]* 11220239

TOTAL					
TOTAL FROM PREVIOUS SUMMARY					
TOTAL SINCE MFG.					

MAINTENANCE RECORD

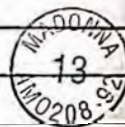
REPAIRS, ADJUSTMENTS, MODIFICATIONS
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

The described maintenance has been performed in accordance with the applicable Airworthiness requirements

E. Deed



1080B ENG MAWT C/W NO FAULTS SB480E C/W
LINES C/W NO FAULTS. AD 2009-02-03 SERVO
D3R2 C/W MUFF HEATER NO FAULTS.

H. Leach M220239 AMO 200-93

Feb 19/10 Coho Helicopter Overhaul Ltd. WO# 3215
A/C C-GGCX TAFH: 62.4 S/N 12391

4 month oil change carried out as per Lycoming manuals. SB480E carried out oil system maintenance no defects. Throttle correlation adjusted as per Robinson maintenance manual. A/c run-up and checked for leaks. No defects.

I have conducted an inspection for conformance to the type of powerplant/airframe controls that were affected by the work accomplished. Signed: *[Signature]* CH408721

The maintenance described has been performed in accordance with the applicable standards of airworthiness. AMO 200-93 Signed: *H. Leach* M220239

← MISSED ENTRY
From J. Logan Bk COHO

APR. 4/13 *[Signature]* CH477115

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD →			86	17	
12 July 10	GCX	50	HR	ENG INSP. c/w Nofaults Found. LYC SI 1080C	
				ENG. MAINT. C/w Nofaults LYC SB 480E OIL + FILTER CHANGE	
				c/w Nofaults AD 2008-14-07 PK FUEL INJ. LINES c/w Nofaults	
				AD CF-90-03 R2 HEAT MUFF INSP c/w Nofaults. LYC Check Sheets used.	
				THE MAINTENANCE DESCRIBED HAS BEEN PERFORMED IN ACCORDANCE WITH THE APPLICABLE STANDARDS OF AIRWORTHINESS. A.M.O. 200-93	Coho W.O. 6068
				Paul H. 129991	

Oct 26/10 Coho Helicopter Overhaul Ltd. WO# 6091 **ENG.**
 A/C C-GGCX TAFH: 124.2 TEngHrs: 124.2 S/N 12391

50, 100 & 300 hour inspections carried out as per Lycoming IO540 operators manuals.
 AD CF90-03R2 c/w muff heater no defects. SI 1080C c/w engine maintenance no defects.
 SB480E c/w oil system maintenance no defects. TCM SB658 c/w distributor maintenance no defects.
 TCM SB 636 c/w ignition switch no defects. TCM SB 643 c/w mag inspection no defects.
 TCM SB653 c/w hot mag test no defects. SB528 c/w mag maintenance no defects.
 SB515 c/w mag maintenance no defects. SB 342E c/w fuel injection lines no defects.
 AD 2008-14-07 c/w fuel injection lines no defects.
 Lycoming SB301B c/w valve inspection no defects. Lycoming SB388C c/w exhaust valves #1,3 and 5 required reaming. Spark plugs replaced new p/n REM38S for ops convenience.
 A/c run-up and checked for leaks no defects. Engine now on Phillips 20w50 cross country oil.

The maintenance described has been performed in accordance with the applicable standards of airworthiness. A.M.O. 200-93 Signed: Paul H. 129991

15 MAR 11 Coho W.O. 6107 / 55.5 HRS A/F + ENG.
 SI 1080C ENG. MAINT c/w Nofaults SB480E OIL SYST. MAINT.
 c/w Nofaults (ENG OIL + FILTER MAINT DUE TO 4MO. LIFE).

THE MAINTENANCE DESCRIBED HAS BEEN PERFORMED IN ACCORDANCE WITH THE APPLICABLE STANDARDS OF AIRWORTHINESS. A.M.O. 200-93

Paul H. 129991

CARRIED FORWARD

TOTAL THIS PAGE		
TOTAL FROM PREVIOUS SUMMARY		
TOTAL SINCE MFG.		

MAINTENANCE RECORD

REPAIRS, ADJUSTMENTS, MODIFICATIONS
 ENTRIES: DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
 NUMBER

May 24/11 Coho Helicopter Overhaul Ltd. WO# 3379
 A/C C-GGCX TAFH: 177.0 S/N 12391

50 hour inspection carried out as per Lycoming manuals.
 SI 1080B c/w engine maintenance no defects.
 SB480E c/w oil system maintenance no defects.
 SB 342E c/w fuel injection lines no defects.
 AD 2008-14-07 c/w fuel injection lines no defects.
 A/c run up and checked for leaks. No defects noted.

The maintenance described has been performed in accordance with the applicable standards of
 airworthiness. AMO 200-93 Signed: *[Signature]* 11/22/2011

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	

BROUGHT FORWARD	→	186.0	
16 JUNE 11	COHO W.O.	6135	OVERSPEED DETERMINED TO BE 4.7% USING ROBINSON METHOD M/R SANDLES INSPECTED FOR BRINWELCING NO FAULT ENG CYLINDERS BORESCOPED NO FAULTS VALVE TRAIN EXAMINED NO FAULTS ENG OIL DRAINED + FILTERS EXAMINED NO FAULTS FOUND. TACH MAG REMOVED + TACH POINTS CHANGED LSB 663 ACCOMPLISHED USING O.A. ENG. TESTER + GAPPED TO .016" A/C GROUND RUN + MAGS + LEAK CHECKS C/W + FUNCTION OF GOV C/W NO FAULTS FOUND. @ 186.0 HRS A/F + ENG.

THE MAINTENANCE DESCRIBED
HAS BEEN PERFORMED IN AC-
CORDANCE WITH THE APPLICABLE
STANDARDS OF AIRWORTHINESS.
A.M.O. 200-93
[Signature] 12999/ AMO 200-93

Nov 15/11 Coho Helicopter Overhaul Ltd. WO# 3449
A/C C-GGCX TAFH: 221.4 S/N 12391

50 & 100 hour inspections carried out as per Lycoming IO540 operators manuals.
AD CF90-03R2 c/w muff heater no defects. SI 1080C c/w engine maintenance no defects.
SB480E c/w oil system maintenance no defects. TCM SB658 c/w distributor maintenance no
defects. TCM SB 636 c/w ignition switch no defects. TCM SB 643 c/w mag inspection no
defects. TCM SB653 c/w hot mag test no defects. SB528 c/w mag maintenance no defects.
SB515 c/w mag maintenance no defects. SB 342E c/w fuel injection lines no defects.
AD 2008-14-07 c/w fuel injection lines no defects.
Starter ring gear p/n AEL72566 replaced due to teeth damage.
Starter p/n p/n BC315-100-4 s/n 0308240343 repaired by Flyrite WO# 4440 then re-installed.
A/C run-up and checked for leaks. No defects.

The maintenance described has been performed in accordance with the applicable standards of
airworthiness. AMO 200-93 Signed: *[Signature]* 120239

221.4			CARRIED FORWARD

TOTAL THIS PAGE			
TOTAL FROM PREVIOUS SUMMARY			
TOTAL SINCE MFG.			

3449

MAINTENANCE RECORD

REPAIRS, ADJUSTMENTS, MODIFICATIONS
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE NUMBER

JOURNEY		CREW		RECORD OF TIME			TOTAL AIR TIME SINCE MANUFACTURE
DATE	POINT OF DEPARTURE & DESTINATION	NAMES	UP	DOWN	AIR TIME	FLIGHT TIME	
TOTAL BROUGHT FORWARD							186.25 hr.
18 June 2011	AT CUSTOMER REQUEST	DUE TO CONTINUANCE OF: PREVIOUS SNAGS. RH ENG MAG (EACH) REMOVED M10-600646-201 SN E0BAA115 REMOVED PN=10600646-20 SN E110A117 INSTALLED GOVERNOR CONTROLLER PN DZ78-2 SN 2449 REV E REMOVED SN 0706 INSTALLED A/C GRND RUN APPROX 15 COOLING OPERATIONS DONE WITH NO FAULTS. BOTH MAG + CONTROLLER ARE NEW FROM MADONNA. CONTROLLER IS A RENTAL SHOWN ON PARKING SCOP. TEST FLIGHT REQ'D THE MAINT. DESCRIBED HAS BEEN PERFORMED IN ACCORDANCE WITH THE APPLICABLE STANDARDS OF AIRWORTHINESS Paul Pt. 129991					
18 June 2011	CTYF	Fisher	1625	1645	.3		186.6

MISSED ENTRY
From S. Log
BY COHO
APP. 04/13
C-~~ASB~~
CH477115

10 APR 12	COHO W.O.	GZC1	242.3	HRS	TEN		
ENG OIL + FILTER CHANGED AS PER LYC HANDBOOK							
LS1 10800 ENG MAINT C/W NO FAULTS							
LSB 480E OIL + FILTER CHANGE C/W NO FAULTS.							
A/C GRND RUN FOR LEAKS NO FAULTS							
THE MAINTENANCE DESCRIBED HAS BEEN PERFORMED IN ACCORDANCE WITH THE APPLICABLE STANDARDS OF AIRWORTHINESS. A.M.O. 200-93 Paul Pt. 129991							

MISSED ENTRY FROM S. LOG BY COHO

APR. 04/13
C-~~ASB~~
CH477115

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
14 DEC 12	36	8	221	4	

December 14, 2012 - C-GGLA, S/N 12391

50/100 Hour Engine Insp. C/W IAW Lycoming IO-540 Series Ops. Manual on Genesis Helicopter Services Inc. WO# 12-GGLA023.
 100 Hour Tanis Engine Pre - Heater Kit Insp. C/W - no defects found
 CF-90-03R2 Exhaust-type heater Insp. - C/W, no defects found
 AD2012-19-01 Failure of the crankshaft - N/A by engine S/N per Lycoming SB569A
 AD2011-26-04 Fuel injection line & support clamp Insp. - C/W, no defects found
 Lycoming SI1129B Methods for checking DC alternator & generator belt tension - C/W, new belt tensioned within limits
 Lycoming SI1191A Cylinder compression - C/W engine warm 80psi input - 1) 79, 2) 78, 3) 79, 4) 77, 5) 78, 6) 78.
 Lycoming SI1080C Maintenance items for special attention - C/W, no defects found
 Lycoming SB342F Fuel injection line & support clamp Insp. - C/W, no defects found
 Lycoming SB480E Oil/filter change & screen cleaning, filter/screen content Insp. - C/W, no defects found
 TCM SB643B Maintenance intervals for all TCM & Bendix aircraft magnetos & related equipment - C/W, mags timed to 20° BTDC Cyl. #1
 TCM SB658 Distributor gear maintenance - C/W, no defects found
 TCM SB663A Magneto tachometer breaker points assy. - previously C/W @ overhaul, TSO 0.0 Hrs
 Removed RH Magneto P/N 10-600646-201, S/N E11BA117 for 4yr overhaul
 Removed LH Magneto P/N 10-600616-9, S/N E07LA098 for 4yr overhaul
 Installed RH Magneto P/N BL-600646-201, S/N E12HA271R - TSO 0.0 Hrs
 Installed LH Magneto P/N BL-600616-9, S/N E12HA262R - TSO 0.0 Hrs
 Magneto drive cushions replaced with new - 68H22624
 Engine oil & filter replaced with new - 8L 20W-50, CH48108-1
 Engine air filter replaced with new - C771-2
 Sparkplugs serviced & rotated
 Ground run & leak check C/W
 Weight & Balance amendment #7 in effect - EWCG 1587.82 lbs @ 104.10° longitudinal, -0.08 lateral.

The described maintenance has been performed in accordance with the applicable airworthiness requirements
 Subject to satisfactory Flight Check IAW RHC R44 MM Sec. 2.220

AMO 64-12
 ACA 1



AMO: 98-91
 Central Aircraft Maintenance
 Hangar #7 - 2610 Thayer Ave
 Saskatoon, SK S7K 6S1
 Ph. Office.: 306-653-4616

Aircraft registration: C-GGLA
 Work report number: 1
 Date: Mar 26, 2013
 Engine log



Aircraft TTAF : 284.2

Engine TTSO : 284.2

Engine SN: L-32971-48E

Item	Description	Correction
1	Higher than normal idle ERPM found during shutdown procedure. Requires adjustment from 66% ERPM to 58%-62% ERPM	Idle ERPM adjusted to 60% IAW MM 6.495. No further faults found.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Name: Jay Foster License no.: ACA #8

CARRIED FORWARD					
TOTAL THIS PAGE					
TOTAL FROM PREVIOUS SUMMARY					
TOTAL SINCE MFG.					

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD ➔					



AMO: 98-91
 Central Aircraft Maintenance
 Hangar #7 - 2610 Thayer Ave
 Saskatoon, SK S7K 6S1
 Ph. Office.: 306-653-4616

Aircraft registration: C-GGLA
 Work report number: 2
 Date: Apr 12, 2013
 Engine log

Aircraft TTAf : 289.8

Engine TTSO : 289.8

Engine SN: L-32971-48E



Item	Description	Correction
1	50 hr engine inspection.	50 hr engine inspection completed IAW Lycoming Operator's Manual section 4 paragraph 4. No faults found.
2	AD 2009-02-03 - Fuel injection servo plug.	AD 2009-02-03 previously complied with. No further repetitive inspection required.
3	SI1080C - Maintenance for special items.	Maintenance of special items completed IAW SI 1080C. No faults found.
4	SB480E - Oil & filter change.	Oil & filter changed. Filter checked for contamination. None found. Engine replenished with 9 qts Phillips 20W50 oil. Ground run. Leak checked. No leaks found.
6	SB-67 - R44 II Fuel hose supports.	SB-67 previously complied with.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Name: [Signature] License no.: ACA #8

Aug 6. 13 45.8 335.6

SOUL Soul Helicopters
 T.C. AMO 63-10
 W.O. # 13GLA0807

9 Aug 2013
 R44 RII - C-GGLA - SN: 12391 - TTSN: 335.6 Hrs
 IO-540-AE1A5 - SN: L-32971-48E - TTSN: 335.6 Hrs

1. 4 Mth/50/100 Hr Inspections carried out as per R44 MM Sect 1.101, Table 1 & Lycoming IO-540 Ops Manual.
2. Oil & Filter Changed with 8L Phillips 20W50X/C & AA48108-2 Filter.
3. Spark Plugs Serviced & Rotated.
4. Engine Idle RPM Adjusted as per MM Sect. 6.495 & Throttle Correlation Adjusted as per MM Sect. 10.150.
5. Lycoming SI 1080C, SI 1129B, SB 480E, SB 342G & TCM SB 643 All C/W during inspection.
6. CF-90-03R2 (Cabin Heat Muffler Insp.) C/W - No Defects or Leaks Found.
7. AD 2011-26-04 (Fuel Inj. Lines & Clamps) C/W - Inspected as per MSB 342G, No Defects Found.

The described maintenance has been performed in accordance with the applicable airworthiness requirements.

Sign: [Signature] Name: Phil Hannah Lic/ACA: 63-10-01

CARRIED FORWARD

TOTAL THIS PAGE

TOTAL FROM PREVIOUS SUMMARY

TOTAL SINCE MFG.

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</small>
	HRS.	MIN.	HRS.	MIN.	
	BROUGHT FORWARD →		335	6	
8 OCT 2013	—		388	2	



AMO: 98-91
 Central Aircraft Maintenance
 Hangar #7 - 2610 Thayer Ave
 Saskatoon, SK S7K 6S1
 Ph. Office.: 306-653-4616

Aircraft registration: C-GGLA
 Work report number: 4
 Date: Oct 22, 2013
 Engine log

Aircraft TTAF : 388.2

Engine TTSO : 388.2

Engine SN: L-32971-48E

Item	Description	Correction
1	Current Idle Setting is High @ 65% ERPM v. 58-62% ERPM	Engine Idle adjusted to 58% ERPM IAW Precision Airmotive Company Form 15-338E Section 5-4 and RHC MM Section 10.150; Engine Idle Mixture verified correct IAW RHC MM Section 6.495 Para 23 Throttle Correlation Rigging carried out IAW RHC MM Section 10.150; Fuel Control side Rod End of Push-Pull Tube A336-6 shortened by 1 full turn to obtain .010" -.030" dimension. Engine and Rotor RPM run to 102% and chopped; Smooth needle split from 102% to idle with no engine roughness or erratic RPM indications; Idle quality is acceptable; Condition acceptable IAW RHC MM Section 6.495 Para 23.
2	Needles do not split when throttle is chopped @ 75% ERPM as per RHC POH	I certify that I have conducted a dual safety inspection of the controls affected by the work done.

ACA #12

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Name: Ryan Gillis License no.: ACA #12

Name: Trevor Lepzki License no.: ACA #3

AMO: 98-91
 Central Aircraft Maintenance
 Hangar #7 - 2610 Thayer Ave
 Saskatoon, SK S7K 6S1
 Ph. Office.: 306-653-4616

Aircraft registration: C-GGLA
 Work report number: 11
 Date: Apr 28, 2014
 Engine log

Aircraft TTAF : ~~420.4~~
 422.4

Engine TTSO : ~~420.4~~
 422.4

Engine SN: L-32971-48E

Item	Description	Correction
3	Lycoming SB301B Maintenance and Service Limitation for valves	Lycoming SB301B (Part 1) carried out; No defects noted
4	Lycoming SB388C Determine Exhaust Valve and Guide Condition	Lycoming SB388C (Part 2-A) carried out; Exhaust Valve Stem-Guide clearance within limits; No defects noted
5	Lycoming 300 Hour Engine Inspection	Lycoming 300 Hour Engine Inspection carried out IAW Lycoming Engine MM Section 4-6; No defects noted
6	Ground Run Leak check required for SB301B, SB388C and 300 hour Engine Inspection	Ground Run Leak check carried out serviceable for SB301B, SB388C and 300 hour Engine Inspection

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Name: Ryan Gillis License no.: ACA #12



CARRIED FORWARD

TOTAL THIS PAGE	
TOTAL FROM PREVIOUS SUMMARY	
TOTAL SINCE MFG.	

ENGINE SERVICE AND

INSTALLATIONS, INSPECTIONS,

NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR CORRECTIONS

DATE	TIME RUN		TIME SINCE OVERHAUL	
	HRS.	MIN.	HRS.	MIN.
1-OCT-2013			384	1
1-OCT-2013			584	1



AMO: 98-91
 Central Aircraft Maintenance
 Hangar #7 - 2610 Thayer Ave
 Saskatoon, SK S7K 6S1
 Ph. Office.: 306-653-4616

Aircraft registration: C-GGLA
 Work report number: 3
 Date: Oct 01, 2013
 Engine log

Aircraft TTAF : 384.1

Engine TTSO : 384.1

Engine SN: L-32971-48E

Item	Description
1	Engine 50 Hour Maintenance and Inspection
2	SB480E Part 1.C and Part 2; Engine Oil, Filter Change, Screen Cleaning and Filter/Screen Content Inspection
3	SI1080C Maintenance Items for Special Attention
4	Tanis Heater Inspection

Correction

Engine 50 Hour Inspection carried out IAW Lycoming Operator's Manual (IO-540). SB480E Part 1.C and Part 2 carried out; No contamination found in filter or suction screen; Engine replenished with 9 qts Phillips 20W50 Oil; Filter PN: CH48108-1 installed new SI1080C (Cylinder Baffles, Overheating, Exhaust System, Spark Plugs, Fuel Injectors); Carried out No faults found. No debris in Fuel Inlet Screen. Tanis Heater Inspection carried out IAW Tanis ICA for Piston (Rev A, 24-Aug-2010) and Rotorcraft (Rev B, 16-May-2011); No Defects. C181-3 Bearing Lubricated IAW Section 1.140; No Defects; Ground Run required. Ground run carried satisfactory.

Lubricate C181-3 bearing per Section 1.140

Ground Run, Leak Check for WR Item #1,2,3,6



The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Name: Trevor Lepitzki License no.: ACA #3



AMO: 98-91
 Central Aircraft Maintenance
 Hangar #7 - 2610 Thayer Ave
 Saskatoon, SK S7K 6S1
 Ph. Office.: 306-653-4616

Aircraft registration: C-GGLA
 Work report number: 8
 Date: Jan 20, 2014
 Engine log

Aircraft TTAF : 405.9

Engine TTSO : 405.9

Engine SN: L-32971-48E

Item	Description
1	SB480E Part 1.C and Part 2; Engine Oil Change, Filter Change, Screen Cleaning and Filter/Screen Content Inspection

Correction

SB480E Part 1.C and Part 2 carried out; No contamination found in filter or suction screen; Engine replenished with 9 qts Phillips 20W50 XC Oil; Filter PN CH48108-1 installed new. Ground Run, Leak check carried out servicable.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Name: Ryan Gillis License no.: ACA #12



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TOTAL THIS PAGE	
TOTAL FROM PREVIOUS SUMMARY	
TOTAL SINCE MFG.	

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	

BROUGHT FORWARD



AMO: 98-91
 Central Aircraft Maintenance
 Hangar #7 - 2610 Thayer Ave
 Saskatoon, SK S7K 6S1
 Ph. Office.: 306-653-4616

Aircraft registration: C-GGLA
 Work report number: 12
 Date: May 21, 2014
 Engine log

Aircraft TTAF : 430.6

Engine TTSO : 430.6

Engine SN: L-32971-48E

Item	Description	Correction
1	Progressive RHC 100-Hour/Annual Maintenance & Inspection IAW RHC MM 2.200 & 2.400 to be started	Progressive RHC 100-Hour/Annual Maintenance & Inspection IAW RHC MM 2.200 & 2.400 started at 430.6 AFTT; Sections 2.410 Para 1-6 carried out at this time; Inspection to be completed no later that 440.6 AFTT (+10 hours/10% from start time)
4	AD CF-90-03R2 - Exhaust type cockpit/cabin heaters (muff) inspect pipes & tubes to detect deterioration Lycoming SB-480E Oil Change, Filter Change and Screen Cleaning	AD CF-90-03R2 carried out serviceable; No defects
7	Lycoming Engine 50 Hour Inspection IAW Lycoming Operator Manual Section 4.4	Lycoming SB-480E carried out serviceable; No defects; Filter PN: CH48108-1 (TN: 9505 installed; 9qts of Phillips 20W50XC (TN: 9396) Oil added.
9	Lycoming Service Instruction No. 1080C Maintenance Items for Special Attention (Cylinder Baffels, Overheating, Exhaust System, Spark Plugs, Fuel Injectors, Oil Change, Fuel Inlet Strainer)	Lycoming Engine 50 Hour Inspection carried out serviceable; No defects Lycoming Service Instruction No. 1080C carried out serviceable; No defects
10	Lycoming SB-342G Fuel Line and Support Clamp Inspection & Installation	Lycoming SB-342G carried out serviceable; No defects
11	Ground Run Leak Check Required for Oil Filter, Oil Sump Screen and Fuel Inlet Fitting	Ground Run Leak Check serviceable.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Name: Ryan Gillis License no.: ACA#12

3078
 128
 9098



AMO: 98-91
 Central Aircraft Maintenance
 Hangar #7 - 2610 Thayer Ave
 Saskatoon, SK S7K 6S1
 Ph. Office.: 306-653-4616

Aircraft registration: C-GGLA
 Work report number: 13
 Date: May 22, 2014
 Engine log

Aircraft TTAF : 430.6

Engine TTSO : 430.6

Engine SN: L-32971-48E

Item	Description	Correction
1	SI1191A cylinder compression test	#1-78, #2-76, #3-79, #4-80, #5-78, #6-79

Name: Bart Timmer License no.: ACA#6

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

60
 50

TOTAL THIS PAGE					CARRIED FORWARD
TOTAL FROM PREVIOUS SUMMARY					
TOTAL SINCE MFG.					

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD →					



AMO: 98-91
 Central Aircraft Maintenance
 Hangar #7 - 2610 Thayer Ave
 Saskatoon, SK S7K 6S1
 Ph. Office.: 306-653-4616

Aircraft registration: C-GGLA
 Work report number: 14
 Date: Jun 05, 2014
 Engine log

Aircraft TTAF : 444.5

Engine TTSO : 444.5

Engine SN: L-32971-48E

Item	Description	Correction
1	Lycoming Engine 100 Hour Inspection IAW Lycoming Operator Manual Section 4.5	Lycoming Engine 100 Hour Inspection IAW Lycoming Engine Operator Manual Section 4.5 complied with satisfactory; Spark Plugs cleaned, re-gapped, tested and rotated; Brittle Ty-Wraps for Alternator/Ignition Harness replaced new; Oil/Filter changes tracked independently with Lycoming SB-480E and Lycoming Engine Operator Manual Section 4.4 @ 50 Hours intervals (Previously complied with @ 430.7 AFTT).
2	Lycoming Service Instruction No. 1080C Maintenance Items for Special Attention (Magnets, Spark Plugs, Sticking Valves)	Lycoming Service Instruction No. 1080C (Magnets, Spark Plugs, Sticking Valves) complied with satisfactory.
3	Lycoming Service Instruction SI1129B DC Alternator and Generator Belt Tension	Lycoming Service Instruction SI1129B complied with satisfactory; Alternator belt tension within limits.
4	Magneto TCM SB643B Maintenance Intervals for all TCM and Bendix Aircraft Magnets and Related Equipment; 100 Hour Items IAW Para 1.A/B/C/D	Magneto TCM SB643B 100 Hour Items IAW Para 1.A/B/C/D carried out; Approx 2 degree timing adjustment to RH Magento required and carried out; RH and LH Magnets synchronized at 20 Degrees BTDC IAW Lycoming Engine Data Plate.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Name: Ryan Gillis License no.: ACA #12



AMO: 98-91
 Central Aircraft Maintenance
 Hangar #7 - 2610 Thayer Ave
 Saskatoon, SK S7K 6S1
 Ph. Office.: 306-653-4616

Aircraft registration: C-GGLA
 Work report number: 17
 Date: Sep 25, 2014
 Engine log

Aircraft TTAF : 476.4

Engine TTSO : 476.4

Engine SN: L-32971-48E

Item	Description	Correction
1	Lycoming SB-480E Part 1.C and Part 2; Engine Oil Change, Filter Change, Screen Cleaning and Filter/Screen Content Inspection	SB-480E Part 1.C and Part 2 carried out; No contamination found in filter or suction screen; Engine replenished with 9 qts Phillips 20W50XC Oil; Filter PN: CH48108-1 installed new; Maintenance Release subject to satisfactory ground run and leak check.
2	Lycoming SI-1080C Maintenance Items for Special Attention	SI1080C (Cylinder Baffles, Overheating, Exhaust System, Spark Plugs, Fuel Injectors); Carried out No faults found. No debris in Fuel Inlet Screen; Maintenance Release subject to satisfactory ground run and leak check.
3	Engine 50 Hour Maintenance and Inspection	Engine 50 Hour Inspection carried out serviceable IAW Lycoming Operator's Manual (IO-540). Maintenance Release subject to satisfactory ground run and leak check.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Name: Ryan Gillis License no.: ACA #12



PREVIOUS SUMMARY		
TOTAL SINCE MFG.		

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE INSTALLATIONS, INSPECTIONS,
	HRS.	MIN.	HRS.	MIN.	



Hangar #7 - 2610 Thayer Ave
 Saskatoon, Sask. S7L 6S1
 Ph. Office: (306) 653-4616
 Fax: (306) 653-0070

Aircraft registration: C-GGLA
 Work report number: 20
 Date: Nov 10, 2015
 Engine log

A.M.O. : 98-91
 Aircraft TTAf : 484.0 Engine TTSO : 484.0

Engine SN: L-32971-48E

Item	Description	Correction
1	100 HR/Annual Inspection.	100hr/Annual inspection carried out as per RHC R-44 manual and Lycoming IO-540 series operators manual
2	Tanis heater inspection - Inspect condition.	Tanis heater inspected, found broken wire on oil sump heater element.
4	Cold weather baffles inspection.	Cold weather baffles kit inspected, no faults found
5	480E Part 1.C and Part 2 (Recur) SB-480 Part 1.C and Part 2 Engine and oil filter change.	Engine oil and filter changed as per SB 480E Part 1.C and Part 2. No contamination found. Eng filled with 9 qts Phillips 20W50XC Oil, filter P/N CH48108-1 installed. Eng. ground run and leak checked satisfactory.
9	Heat shield crack under heat exchanger	Heat shield replaced, P/N on/off D785-4
10	Inlet lips rubbing on scroll fan	Inlet lips replaced, P/N on/off D229-1
12	Broken wire on Tanis heater oil sump plug	Tanis heater element replaced, P/N TTP2634-115/50. Function checked servicable
13	Engine overspeed during ground run attempt	Engine overspeed inspection carried out as per SB 369K. Cylinder overspeed inspection completed, No faults found. Oil screens and oil filter inspected, no metal particals found. New filter P/N CH48108-1 installed.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Name: Cindy Pilon License no.: _____
 Cindy Pilon



Subject to satisfactory test flight.

22 JAN 16	3	5	487	5
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January 22, 2016 - C-GGLA, S/N 12391 - TAFT 487.5 Hrs, Collective 487.5 Hrs
 The following work was carried out IAW RHC R44 MM & CAR 625 Appendix C & B part I on Genesis Helicopter Services Inc. WO# 16-GGLA460
 50/100 Hour engine inspection C/W IAW Lycoming IO-540 Series OM
 CF 90-03R2 Exhaust-type cabin heater inspection - C/W, no defects found
 AD 2015-19-07 Fuel injection line & support clamp inspection - C/W, no defects found
 Lycoming SI1129D Methods for checking DC alternator & generator belt tension - C/W, belt tensioned within limits
 Lycoming SI1191A Cylinder compression - C/W engine warm 80psi input; 1) 79, 2) 78, 3) 77, 4) 78, 5) 78, 6) 78
 Lycoming SI1080C Maintenance items for special attention - C/W, no defects found
 Lycoming SB342G Fuel injection line & support clamp inspection - C/W, no defects found
 Lycoming SB480E Oil/filter change & screen cleaning, filter/screen content inspection - C/W, no defects found
 TCM SB643B Maintenance intervals for all TCM & Bendix aircraft magnetos & related equipment - C/W, timed to 20° BTDC #1 cylinder
 Engine idle, idle-mixture & throttle rigging/correlation adjusted within limits. Normal operation during ground runs @ idle through 100%
 Engine oil & filter replaced with new - 8L Aeroshell W80, CH48108-1 filter
 Engine air filter replaced with new - C771-2
 Sparkplugs serviced & rotated
 Ground run & leak check C/W

I have conducted an inspection for conformance to the flight/powerplant controls affected by the work accomplished

AMO 64-12
ACA# 1

The described maintenance has been performed in accordance with the applicable airworthiness requirements

AMO 64-12
ACA# 2

TOTAL THIS PAGE					
TOTAL FROM PREVIOUS SUMMARY					CARRIED FORWARD
TOTAL SINCE MFG.	487	5			

RECORD OF ENGINE AIRWORTHINESS DIRECTIVES (A/D), SERVICE BULLETINS (S/B),

DATE A/D, S/B, S/I, MODS DETAILS OF

AIRCRAFT S/N: 12391 **ENGINE S/N** L-32971-48E **Date:** September 19, 2008

Lycoming IO-540-AE1A5 Engine FAA AD's

Number	Reference	Description	RX	Frequency	C/W
AD 63-14-03	SB 295	Oil Pump Drive Shaft O-540 Eng S/N 101-40 to 5264-40	X	100 Hours	N/A by Model
AD 66-20-04	SB 307	Oil Filter Adapter Gasket Inspection			C/W by MFR
AD 75-08-09	SB 381B & 385C	Oil Pump Drive Shaft / Impeller Inspection			C/W by MFR
AD 63-14-03	SB 295	Oil Pump Drive Shaft			C/W by MFR
AD 66-20-04	SB 307	Oil Filter Adapter Gasket Inspection			C/W by MFR
AD 75-08-09	SB 381B & 385C	Oil Pump Driveshaft/impeller			C/W by MFR
AD 75-09-15	SB 382	Fuel Flow Divider Cover Gasket			C/W by MFR
AD 78-23-10	SB 428, 429, 430	Bendix Fuel Injectors			C/W by MFR
AD 79-04-05	SB 433A	Bendix Fuel Injectors			C/W by MFR
AD 91-08-07	SB 494,497	Fuel Pump vent hose fitting leak check			C/W by MFR
AD 92-12-05	SB 501B	Piston Pins Inspection			C/W by MFR
AD 93-11-11	Aero Access. 002	AC, Lycoming & Rajay Diaphragm Fuel Pumps			C/W by MFR
AD 95-07-01	Super. Air 95-002	Connecting Rod Bolts Inspection			C/W by MFR
AD 96-09-10	454B,455D,524,456	Engine Oil Pump Impeller Inspection			C/W by MFR
AD 96-23-03	SB 525A	High Pressure Fuel Pump			N/A by DOM
AD 98-18-12		Fuel Pumps			N/A by Model
AD 2000-18-53		Oil Filter Plate			C/W by MFR
AD 97-15-11	SB 527C	Piston Pins Inspection			C/W by MFR
AD 98-17-11		Crankshaft Inspection			C/W by MFR
AD 2002-19-03	MSB 552	LTIO/TIO/IO 540 Crankshafts			C/W by MFR
AD 2002-26-01	MSB 342D	Superceded by AD 2008-14-07	X	100 Hours	C/W by MFR
AD 2003-14-03	SB 529B	Torque Check Inspection of Rotary Fuel Pumps			N/A by P/N
AD 2004-05-24	MSB 554	Crankshaft Gear Retaining Bolts			C/W by MFR
AD 2004-10-14	MSB 475C	Crankshaft Gear Retaining Bolts	X	O/H S/Stop	N/A - new install
AD 2005-12-06	MSB 645	Reduced inspection interval for impulse coupling			N/A by Series
AD 2005-19-11	MSB 566	Crankshafts Failures			N/A by SB 566
AD 2006-10-21		Prevent fatigue failure of the connecting rods	X	3000 F/C	N/A by P/N
AD 2006-12-07	Eci SB 05-08 R2	Cracks in the cyclinder assemblies			N/A by P/N
AD 2006-20-09	MSB 569A	Crankshaft Failures			N/A by S/N
AD 2007-04-19R1	SAP BO6-1A	Cylinder Separation			N/A by P/N
AD 2008-06-51	PRS-107 R1	Superceded by AD 2008-08-14	X	50 Hours	C/W by MFR
AD 2008-08-14	PRS-107 R2	Fuel Injection Servo Plugs	X	50 Hours	C/W by MFR
AD 2008-14-07	MSB 342E	Fuel Injector Line Support Clamps	X	100 Hours	C/W by MFR

AIRCRAFT S/N: 12391 **ENGINE S/N** L-32971-48E **Date:** September 19, 2008

Lycoming IO-540-AE1A5 Engine Foreign AD's

Number	Reference	Description	RX	Frequency	C/W
F-2001-139R1	F-2005-023	Cancellation Notice SS'd by F2005-023			Cancelled
F-2005-023		Engines Overhauled by Provence Aero Maintenance			N/A by no O/H

AIRCRAFT S/N: 12391 **ENGINE S/N** L-32971-48E **Date:** September 19, 2008

Lycoming IO-540-AE1A5 Engine CDN AD's

Number	Reference	Description	RX	Frequency	C/W
CF-2005-40		Non-conformance of Maintenance on Piston Engines			N/A by install date
CF-90-03R2		Exhaust type Cabin Heaters Inspection	X	150 HR/Annual	C/W - NEW

~~AD CF90-03R2~~ ERROR
NEXT PAGE

RECORD OF ENGINE AIRWORTHINESS DIRECTIVES (A/D), SERVICE BULLETINS (S/B),

DATE	A/D, S/B, S/I, MODS	DETAILS OF
9 Jun 09	AD CF90-03R2	MUFF HEATER c/w NO DEFECTS
↓	AD 2008-14-07	FUEL INJ LINES c/w NO FAULTS
9 Jun 09	AD 2009-02-03	SERVO PLUG c/w LETTER G FOUND
Oct 26/10	Coho Helicopter Overhaul Ltd. WO# 6091	AD/SB
A/C C-GGCX	TAFH: 124.2	TEngHrs: 124.2 S/N 12391
<p>AD CF90-03R2 c/w muff heater no defects. SI 1080C c/w engine maintenance no defects. SB480E c/w oil system maintenance no defects. TCM SB658 c/w distributor maintenance no defects. TCM SB 636 c/w ignition switch no defects. TCM SB 643 c/w mag inspection no defects. TCM SB653 c/w hot mag test no defects. SB528 c/w mag maintenance no defects. SB515 c/w mag maintenance no defects. SB 342E c/w fuel injection lines no defects.</p> <p>AD 2008-14-07 c/w fuel injection lines no defects.</p> <p>Lycoming SB301B c/w valve inspection no defects. Lycoming SB388C c/w exhaust valves #1,3 and 5 required reaming.</p> <p>The maintenance described has been performed in accordance with the applicable standards of airworthiness. AMO 200-93 Signed: <i>[Signature]</i> 129991</p>		
24 MAY 11	AD 2008-14-07	FUEL INJ. LINES
Nov 15/11	Coho Helicopter Overhaul Ltd. WO# 3449	
A/C C-GGCX	TAFH: 221.4	S/N 12391
<p>AD 2011-12-10 part a c/w main rotor blades no defects.</p> <p>Robinson SB 72 c/w main rotor blades no defects.</p> <p>The maintenance described has been performed in accordance with the applicable standards of airworthiness. AMO 200-93 Signed: <i>[Signature]</i> 1200239</p>		
<p>July 4, 2012 - C-GGLA</p> <ul style="list-style-type: none"> - SB-82 - Rotor Brake SW change C/W tested - no faults - SL-43 - C/W push/pull tube - no corrosion found - SB-83 - T/R blades C/W POH amended - no faults - SB-84 - Fuel caps C/W - no fault - SL-42 - Start circuit N/A due to S/N - SB-81 - M/R servos N/A due to date of manufacture & history - AD 2012-03-06 - Avstar parts N/A due precision installed & no history of repair 		
<p>December 14, 2012 - C-GGLA, S/N 12391</p> <ul style="list-style-type: none"> - CF-90-03R2 Exhaust-type heater Insp. - C/W, no defects found - AD2012-19-01 Failure of the crankshaft - N/A by engine S/N per Lycoming SB569A - AD2011-26-04 Fuel injection line & support clamp Insp. - C/W, no defects found - Lycoming SI1129B Methods for checking DC alternator & generator belt tension - C/W, new belt tensioned within limits - Lycoming SI1191A Cylinder compression - C/W engine warm 80psi input - 1) 79, 2) 78, 3) 79, 4) 77, 5) 78, 6) 78. - Lycoming SI1080C Maintenance items for special attention - C/W, no defects found - Lycoming SB342F Fuel injection line & support clamp Insp. - C/W, no defects found - Lycoming SB480E Oil/filter change & screen cleaning, filter/screen content Insp. - C/W, no defects found - TCM SB643B Maintenance intervals for all TCM & Bendix aircraft magnetos & related equipment - C/W, mags timed to 20° BTDC Cyl. #1 - TCM SB658 Distributor gear maintenance - C/W, no defects found - TCM SB663A Magneto tachometer breaker points assy. - previously C/W @ overhaul, TSO 0.0 Hrs 		
9 AUG 2013	SI 1080C SI1129B, SB480E, SB342F + TCM SB643	ALL C/W.
	CF 90-03-R2	C/W - NO LEAKS OR DEFECTS FOUND
	AD 2011-26-04	C/W - INSPECTED AS PER MSB 242F - NO DEFECTS

SPECIAL INSPECTIONS (S/I) AND MODIFICATIONS (MODS)

WORK OR INSPECTION PERFORMED	SIGNATURE	LICENCE NUMBER
AMO 200-93	PRUNOLFSO	129991
AMO 200-93	PRUNOLFSO	129991
AMO 200-93	PRUNOLFSO	129991

ENTRIES TRANSCRIBED BY V Garbowski M220239

DATE	JOURNEY POINT OF DEPARTURE & DESTINATION	CREW NAMES	RECORD OF TIME				TOTAL AIR TIME SINCE MANUFACTURE
			UP	DOWN	AIR TIME	FLIGHT TIME	
TOTAL BROUGHT FORWARD						186.25 hr.	
18 June 11	AT CUSTOMER REQUEST	DUE TO CONTINUANCE OF					
	PREVIOUS SALS	RH RAG MING (EACH) REMOVED					
	1110-600646-20	SN 808 AA115 REMOVED					
	1110-600646-20	SN E110A117 INSTALLED					
	GENERATOR CONTROLLER	IN DZ78-Z SN 2449 REVE					
	REMOVED	SN 0706 INSTALLED A/C GRANDIN					
	MANY IS GOWT OPERATIONS DONE WITH NOISE TO.						
	BOTH MAIN CONTROLLER ARE NEW FROM GRANDIN.						
	CONTROLLER IS A RENTAL SUPPLY ON PARKING SLIP.						
	TEST FLIGHT REQ'D						
	THE MAINT. DESCRIBED HAS BEEN PERFORMED IN ACCORDANCE WITH THE APPLICABLE STANDARDS OF ADEQUATENESS						
	P. M. 129991						
18 June 2011	CYF	Fisher	16:25	16:45	.3	156.6	
Jun 18/11	CYF	Fisher / Chernoff		21:15	1.3	187.9	
Jun 19/11	CYF	Fisher / Chernoff	10:35	16:45	2.7	190.6	
Jun 23/11	CYF	Fisher / Chernoff	16:45	19:14	1.4	192.0	
Jun 23/11	CYF	Hewitt / Chernoff	07:50	15:15	1.8	193.8	
Jun 24/11	CYF	Chernoff / Fisher	09:10	12:50	1.4	195.2	
Jun 30/11	Coho Helicopter Overhaul Ltd WOH 3395						
	A/C-GGXX	TAFH 195 7				SIN 12391	
	Peterson SB 72 c/w main rotor blades no defects						
	AD 2311-12 10 part C c/w main rotor blades no defects						
	The maintenance described has been performed in accordance with the applicable standards of						
	adequateness AMO 200 93 Signed <i>[Signature]</i> M220239						
	195.7						

MISSSED ENTRY FROM J. LOG BY COHO.
[Signature] CH477115

[Signature] 129991

TCB S. RATTIE 129991

TCB S. RATTIE R. HOGAN 14-12-1-

[Signature] AMO 63-10 63-10-01

FOUND

