

DATE 19__	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
9-12-10	2436.3		3437.9	Completed annual inspection, repacked wheel bearings, serviced brakes, tires, oleo struts, torque links, shimmy dampener, Jacked aircraft and performed gear retraction and emergency extension. Replaced nose gear downlock spring and checked all landing gear downlock tensions. Replaced battery. RG 35 A. Cleaned fuel screen. Replaced air filter element. Replaced L/H Aux tank sump. Checked flight controls and lubed hinges, rod ends and pulleys. Replaced alignment pin in spinner backing plate and replaced backing plate bolts. Replaced PTT switch. P/N 11-04471 Op checked ELT per FAR 91-207D (next page)

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2019				
9-12	2436.3			(continued) battery expires 12-2022. Complied with ADs 76-07-12 next due 2536.3, AD 89-05-02 elevator control fitting 2536.3, AD 94-20-04 structure of V tail, next due 2536.3, AD 07-08-08, landing gear uplock rollers, next due 2536.3. I certify this aircraft has been inspected in accordance with an annual inspection and found airworthy this date. [REDACTED] IA
3-21-20	2488.6			R ² FAILED GMA342 AUDIO PANEL w/ O'Hare J/N: 342000730. OPS ✓ GOOD. OWNER Mx IAW PART 43 App. A, Para C (31).

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9-30-2018	2384.9		3386.5	TSOH= 1327.9 CHANGED OIL & FILTER INSTALLED NEW CH481101-1 OIL FILTER AND 9 QTS AEROSHELL 15W50. ENGINE RUNUP & LEAK CHECK OK. STEVEN E. COX [REDACTED] BLACKSTONE OIL SAMPLE CHECKS GOOD.
3-20-19	2411.4		3413.0	TSOH= 1354.4 CHANGED OIL & FILTER. INSTALLED NEW CH481101-1 OIL FILTER AND 8 QTS AEROSHELL 100W+. ENGINE RUN-UP & LEAK CHECK OK. STEVEN E. COX [REDACTED] BLACKSTONE OIL SAMPLE

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10-25-19	2464.96		3466.56	TSOH = 1,407.96 CHANGED OIL & FILTER INSTALLED NEW CH481101-1 OIL FILTER & 8 QTS AEROSHELL 10W+. ENGINE RUN-UP & LEAK CHECK OK. BLACKSTONE OIL SAMPLE. STEVEN E. Cox [REDACTED]
3-31-20	2492.5		3494.1	TSOH 1,435.5 CHANGED OIL & FILTER INSTALLED NEW CH481101-1 OIL FILTER & 8 QTS AEROSHELL 10W00 PLUS. ENGINE RUN-UP & LEAK CHECK OK. BLACKSTONE OIL SAMPLE. STEVEN E. Cox [REDACTED]

DATE 2018	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
9-30	2384.9		3386.5	TSDH=1327.9 CHANGED OIL & FILTER INSTALLED NEW CH481101-1 OIL FILTER AND 9 QTS AEROSHELL 15W50. ENGINE RUN-UP & LEAK CHECK OK. STEVEN E. COX [REDACTED] BLACKSTONE OIL SAMPLE CHECKS GOOD.
3-20-19	2411.4		3413.0	TSDH=1354.4 CHANGED OIL & FILTER. INSTALLED NEW CH481101-1 OIL FILTER AND 8 QTS AEROSHELL 100W+. ENGINE RUN-UP & LEAK CHECK OK. STEVEN E. COX [REDACTED] BLACKSTONE OIL SAMPLE

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10-25-19	2464.96		3466.56	TSDH=1407.96 CHANGED OIL & FILTER INSTALLED NEW CH481101-1 OIL FILTER & 8 QTS AEROSHELL 100W+. ENGINE RUN-UP & LEAK CHECK OK. BLACKSTONE OIL SAMPLE. STEVEN E. COX [REDACTED]
3-31-20	2492.5		3494.1	TSDH 1435.5 CHANGED OIL & FILTER INSTALLED NEW CH481101-1 OIL FILTER & 8 QTS AEROSHELL W/100 Plus. ENGINE RUN-UP & LEAK CHECK OK. BLACKSTONE OIL SAMPLE. STEVEN E. COX [REDACTED]



OIL REPORT

LAB NUMBER: [REDACTED]
REPORT DATE: 4/14/2020
CODE: [REDACTED]

UNIT ID: N8359D
CLIENT ID: [REDACTED]
PAYMENT: CC: MC

UNIT

MAKE/MODEL: Continental IO-470-C
FUEL TYPE: Gasoline (Leaded)
ADDITIONAL INFO: Beech J35 Bonanza, 5x Chrome cyls

OIL TYPE & GRADE: Aeroshell W100 Plus (AD)
OIL USE INTERVAL: 28 Hours

CLIENT

STEVEN COX
[REDACTED]
PORTLAND, OR 97209

PHONE: [REDACTED]
FAX: [REDACTED]
ALT PHONE: [REDACTED]
EMAIL: [REDACTED]

COMMENTS

STEVEN: Thanks for the note about the Marvel Mystery Oil. It's a solvent-based fuel additive, so our tests don't detect it, but it very well may have helped with your valve issue, since nickel has improved since last time. We kept it highlighted just because we expect nickel to drop further still, if all goes well. Aluminum and copper barely budged, but stability is in itself an indicator of engine health, so unless you're experiencing mechanical issues on your end, we're not overly concerned. The oil was free from significant contamination. Just check back to monitor metals.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	28	UNIT / LOCATION AVERAGES	27	26	25	UNIVERSAL AVERAGES
	MI/HR on Unit	1,436		1,406	1,354	1,328	
	Sample Date	3/29/2020		10/29/2019	3/20/2019	9/29/2018	
	Make Up Oil Added	2 qts		2 qt		3 qt	
	ALUMINUM	25	23	23	24	18	9
	CHROMIUM	13	11	15	9	7	9
	IRON	50	42	56	36	25	40
	COPPER	10	8	11	8	4	4
	LEAD	4665	3954	3940	4146	3064	3153
	TIN	1	1	1	1	1	1
	MOLYBDENUM	1	2	2	2	1	2
	NICKEL	11	8	17	3	2	6
	MANGANESE	1	1	1	1	0	1
	SILVER	0	0	0	0	0	0
	TITANIUM	0	0	0	0	0	0
	POTASSIUM	0	0	0	1	0	0
	BORON	1	1	1	1	1	1
	SILICON	10	9	8	10	8	8
	SODIUM	3	1	1	1	0	1
	CALCIUM	1	1	1	1	2	30
	MAGNESIUM	1	1	1	1	0	1
	PHOSPHORUS	1204	1233	1314	1227	1187	473
	ZINC	4	4	3	4	3	25
	BARIUM	0	0	0	0	0	0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	91.7	86-105	96.2	89.5	92.5	
	cSt Viscosity @ 100°C	18.39	17.0-21.8	19.46	17.85	18.57	
	Flashpoint in °F	465	460	485	455	470	
	Fuel %	<0.5	<1.0	<0.5	<0.5	<0.5	
	Antifreeze %						
	Water %	0.0	0.0	0.0	0.0	0.0	
	Insolubles %	0.3	0.6	0.2	0.3	0.3	
	TBN						
	TAN						
	ISO Code						

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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Page No.	DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
					TOTALS brought forward from previous page
					PROPELLOR ENTRY N8359C PN 278-204-21 SN 7-3402 TACH 2348.61 TTSOH 797.21 TTIS ? April 18 2017 100 HOUR INSPECTION PER SERVICE MANUAL. AD'S C/W THRU 2017-08. Shimmed spinner bulkhead to dome to secure. A.D.62-17-01 Hub welded joint not due at this time <u>I CERTIFY THAT THIS PROPELLER HAS BEEN INSPECTED I/A/W A 100/ANNUAL INSPECTION(ref to far 43 appendix D), WAS DETERMINED TO BE IN AN AIRWORTHY CONDITION AND WAS RETURNED TO SERVICE</u> Timothy J Kline A&P [REDACTED] I.A.
					7/30/18 tach= 2360.3 tsoh= 808.9 N8359D inspect spinner and bulkhead assembly ok at this time, inspect blades ok, test ok no leaks at this time, see AD list for compliances, I certify that this PROPELLER has been inspected IAW an ANNUAL inspection and found to be in airworthy condition, Lance Yomtob [REDACTED] IA
	2019 04-12	2436.5			Completed 100hr insp secured ring for Bkhd. by replacing 4 bolts & staffing. INSTALL LOCK for spinner guide pin- 3/w A/D 62-17-01 by using 10X magnifying glass. I certify this prop has been inspected IAW a 100hr inspection & found airworthy [REDACTED] IA
					SUB-TOTALS this page TOTALS—Carry forward to next page



CONTINENTAL

A E R O S P A C E T E C H N O L O G I E S

Engine Health Checklist

Inspecting Agency	Honeycutt Aviation Olivehurst CA		Date	10/5/19		
Aircraft Owner	Steven Cox		Aviator Services #			
Aircraft Make / Model / Reg. #	J35/N8359D		Aircraft S/N	D-5490		
Engine Model	IO-470C1B	Engine S/N	71181-8-C	Hours	1500	
Oil Type/Weight	AeroShell 15W-50	Hour Interval	30	Analysis	Yes	
Cylinder Differential Compression Check						
Number 1	Number 2	Number 3	Number 4	Number 5	Number 6	
72	58	68	74	62	60	
Master Orifice Reading	PSI – Minimum allowable leakage limit.42					
Comments	Differential Compression Test all within limits IAW M-O Chap. 6					
Cylinder Borescope Inspection						
Inspection Results	Normal Wear Signatures	Light Rust Signatures	Heavy Rust Signatures	Scoring Signatures	Intake Valve Leakage Signatures	Exhaust Valve Leakage Signatures
Cylinder One	X					
Cylinder Three	X					
Cylinder Five	X					
Cylinder Two	X					
Cylinder Four	X					
Cylinder Six	X					
Comments						

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CONTINENTAL

AEROSPACE TECHNOLOGIES

Engine Health Checklist

Cooling Baffle Condition	Good	X	Needs Maintenance		Needs Replacement	
Comments						
Cylinder External Condition	Good	X	Barrel Corrosion		Damaged Head Fins	
	Damaged Barrel Fins				Head/Barrel Leak	
Comments						
Oil Cooler Installation Condition	Good	X	Damaged Mount / Flange		Cooling Fin / Core Damage	
Comments						
Induction System Condition	Good	X	Need to Clean Air Filter Element		Need Replacement Air Filter Element	
	Need Replacement Clamp / Hose				Damaged Tube	
Comments						
Exhaust System Condition	Good	X	Exhaust Leakage Signatures Noted		Need Replacement Hardware/Gasket	
Comments						
Magneto Installation Condition	Good	X	Damaged Mount / Housing		Hardware Missing / Loose	
Comments						
Ignition Harness Condition	Good	X	Lead(s) Chaffed		Needs Replacement Lead(s) / Spring(s)	
Comments						
Spark Plug Condition	Good	X	Cleaning-Gapping-Rotation Needed		Needs Replacement Spark Plug(s)	
Comments						

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Engine Health Checklist

Engine Control Linkage Condition	Good	X	Needs Lubrication/ Maintenance		Needs Replacement Component(s)	
Comments						
Hose / Tubing / Cable / Wiring Condition	Good	X	Component Chaffing		Needs Tie Wrapping	
	Component Needs Replacement				Needs Rerouting	
Comments						
Engine to Airframe Isolation Condition	Good	X	Component/System Isolation Needed		Mount Isolators Damaged	
Comments						
Fuel / Oil Seal Condition	Good	X	Oil Leakage		Fuel Leakage	
Comments						
Engine Appearance	Good	X	Needs Cleaning		Needs Paint/Plating	
Comments						
Other Comments	Reminder have fuel system adjusted in accordance with M-O Chap 6 fuel system set-up instructions at 100 hr. or at annual inspection. Clean fuel nozzles at 300-hour intervals or at Annual. Reminder to inspection mags and alternator every 500 hours.					

For Continental factory assistance please call: 888-826-5465

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