

HIGH PERFORMANCE AIRCRAFT ENGINES, INC.

CRS 0687  
AENA JAR INSAS 1953  
50139 43006

*The Standard*

# NOGG AIRCRAFT AND ENGINE LOG

TT ENGINE, AIRFRAME  
ZERO - 1205

ASA-SE-1

ENGINE RECORD — GENERAL INFORMATION

MANUFACTURER Lycoming MODEL ID 540 S1A5-exp

SERIAL L 129 4H-48A TYPE CERTIFICATE \_\_\_\_\_

THIS ENGINE IS CURRENTLY INSTALLED IN AIRCRAFT Gauchen Glasair II Ser. # 3115

MINIMUM OCTANE FUEL \_\_\_\_\_ OIL GRADE SUMMER \_\_\_\_\_ WINTER \_\_\_\_\_

MAGNETO TIME \_\_\_\_\_ POINT SETTING \_\_\_\_\_ FIRING ORDER \_\_\_\_\_

SPARK PLUG GAP \_\_\_\_\_

MFG. RECOMMENDED OVERHAUL AT \_\_\_\_\_ HOURS.

*The Standard*



**ENGINE LOG**

ORIGINAL MSG'd  
- JAN 1975 -  
(AEROSTAR)

**HIGH PERFORMANCE AIRCRAFT  
ENGINES AND COMPONENTS, INC.**  
MENA, ARKANSAS 71953 501-394-6026  
C.R.S. No. 206-37

Crank LW 108412  
N26628  
7178

Zero since major rebuild.

September 30, 1988

Major rebuilt Lycoming Engine Model IO-540-S1A5, Serial No. L-12944-48A in accordance with Lycoming Overhaul Manual.

Installed new parts in engine as follows: Major overhaul gasket set, crankshaft damper bushings, counterweight plates, counterweight snap rings, counterweight rollers, connecting rod bearings, connecting rod bolts, connecting rod nuts, verna-therm, idler gear, magneto drive bearings, oil pump drive gear, oil pump driven gear, idler shaft bolts, snap ring, crankshaft gear, crankshaft gear bolt, piston cooling nozzles, oil dowel o-rings, set screw, hydraulic lifter bodies, main bearings, front main bearings, hydraulic lifters, idler shaft nut, idler shaft bolts, tach shaft, tach shaft snap ring, oil pressure relief spring, oil pressure relief ball, fuel pump spacer,

(Cont'd)

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piston pins, piston pin plugs, rocker shafts, intake valve stem caps, exhaust valve stem caps, injection nozzles, spark plugs, rocker shaft buttons, cylinder drain hoses, mini clamps, injection fuel tubes, oil filter, magneto cushions, adel clamps, ignition harness, alternator belt, rod bushings, rocker arm bushings, exhaust valves, pistons, valve keepers, valve springs, exhaust studs, piston rings, and valve guides.

Crankcase stress relieved, line bored and resurfaced by DivCo, Inc., Tulsa, Oklahoma.

Crankshaft magnafluxed and dimensionally checked.

Counterweights rebushed by Rick Romans, Tulsa, Oklahoma.

Camshaft reground by Aircraft Specialties Services, Tulsa, Oklahoma.

Connecting rods magnafluxed and rebushed by Aircraft Specialties Services, Tulsa, Oklahoma.

(Cont'd)



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Servo fuel injector and flow divider overhauled by Precision Air, Miami, Florida.

Fuel pump overhauled by Approved Aircraft Accessories, Taylor, Michigan.

Starter and alternator overhauled by Aero Electric, Wichita, Kansas.

Magnetos overhauled by High Performance Aircraft.

Chrome cylinders honed to ring finish by Aircraft Cylinders of America.

Cylinders polished and air flow checked to within 1½% of each other.

High Performance Service Bulletin #1 to be complied with on or before first 15 hours of operation (enclosed). ONE COPY MUST BE RETURNED TO HIGH PERFORMANCE AIRCRAFT.

Engine test run. Note: Minor adjustments may have to be made to coincide with the aircraft.

(Cont'd)

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See back of log book for list of AD Notes.

Magnetos to engine timing should be re-checked at engine installation as per engine data plate.

The aircraft, aircraft engine, or appliance identified above was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service.

Pertinent details of the repair are on file at this repair station under Order # 859 Date 9/30/88

Signed *Jimmy Capitant* FOI  
High Performance Aircraft Engines and Components, Inc  
C.R.S. #206-37

DATE 1990	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
3-13		—	1.0	TAXIED AT VARIOUS RPM SETTINGS.
3-20		.5	.5	FIRST FLIGHT. ADD 2QT OIL
3-20		2.0	2.0	ADDITIONAL FLIGHT TESTING ADD 2QT OIL
3-21		2.1	2.1	CROSS COUNTRY FLIGHT ADD 1QT OIL
3-23		4.8	4.8	CROSS COUNTRY FLIGHT ADD 2QT OIL
3-24		2.2	2.2	CROSS COUNTRY FLIGHT ADD 2QT OIL
4-1		1.4	1.4	LOCAL CHECK OUT FLIGHT.
4-1		.8	.8	" " " "
4-3		3.2	3.2	CROSS COUNTRY TO BUILD TIME ADD 2QT OIL
4-4		3.2	3.2	CROSS COUNTRY TO BUILD TIME ADD 1QT OIL
4-4		3.2	3.2	CROSS COUNTRY TO BUILD TIME ADD 1QT OIL
4-5		1.7	1.7	CROSS COUNTRY TO FINISH TIME CHANGED OIL

25.1 (computer) Restrictions, 4.5-90 J.J.A.

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4-7		4.0	4.0	TO SUN'N FUN FLIGHT W/STOP IN ATHENS, GA. ADD 2 QTS.
4-7		.8	.8	LOCAL PHOTO FLIGHT FOR SPORT AVIATION.
4-11		.7	.7	SUN'N FUN RACE - "BEST AIRCRAFT" & "BEST ENGINEERING"
4-12		5.0	5.0	RETURN FROM SUN'N FUN W/STOP IN ATHENS, GA. ADD 2 QTS.
5-4		.7	.7	LOCAL FLIGHT <span style="border: 1px solid black; padding: 2px;">"GRAND CHAMPION EXP." SUN'N FUN</span>
5-12		Ø	Ø	INSTALLED "BARREL" NUTS ON MAIN HYDRAULIC CYLINDERS AS PER STANDARD-HAMILTON SERVICE BULLETIN #17
5-13		.4	.4	X-COUNTRY WOI & RETURN
5-20		.5	.5	TO BETH & RET. 1 HR LATE GET IN
5-20		.6	.6	TO BETH & RET - "PACIFIC HONEYBUILT"
5-31		.3	.3	TO CHECK OUT GEAR RETRACTION ADJUSTMENTS OK
5-31		—	—	REPLACED NOSE GEAR FORK ATTACH BOLTS
6-16		.7	.7	CHECK OUT AP. AFTER REPAIRS

38.4

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6/10	.5	.5	.5	CHECK OUT AP ALT HOLD - OK.
6/24	.3	.3	.3	CHECK OUT AP CTL.
6/24	.3	.3	.3	TO NINE MI FLIN & RETURN W/TEST HOME BUILT DRUMPHY
7/2	.3	.3	.3	TEST FLIN W/ SCIONA BROWN & AUSTRALIAN TEST PILOT TO TEST TEST - JOHN ROSE & WAGNETS.
7/3	.6	.6	.6	FLIN W/STO GUNBER.
7/6	.2	.2	.2	LOCAL FLIN TO CHECK OUT SLAVE GYRO
7/25	1.0	1.0	1.0	TO OSHKOSH '90
7/31	.8	.8	.8	RETURN TO ELKHARTS FROM OSHKOSH '90
8/19	.7	.7	.7	FLY ON @ LAPORTE & RETURN
8/20	—	—	43.5	CHANGED OIL & FILTER TIGHTENED LEAKING OIL RES. LINE
			TACH	PERIODS 41 HOURS - RUN & CHECK FOR LEAKS.
9-3	1.1	1.1	1.1	X COUNTRY CHECK OUT

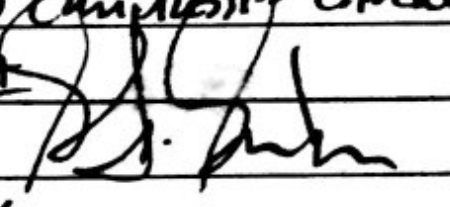


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9-9	.7	.7	.7	MANNING OHIO - MID-EASTERN REGIONAL "FLY-IN" MEET
9-9	.7	.7	.7	RETURN TO ELKHART w/ GRAND CHAMPION TROPHY
9-25	1.0	1.0	1.0	TO OSHKOSH MEETING WITH FOREWORD & RETURN NOTHING RESOLVED
10-2	.6	.6	.6	KALAMAZOO - RETURN - JACK KUNZLE PASS
10-15	.3	.3	.3	LOCAL FLIGHT
10-22	.5	.5	.5	FLYING.
10-30	.7	.7	.7	FLYING w/ Phil Miller.
11-10	.3	.3	.3	FLYING AND 1QT OIL
11-17	.5	.5	.5	BIANNUAL
11-23	.3	.3	.3	FLYING
11-25	1.4	1.4	1.4	FLYING - 1/2 w/ Phil Miller AND 1QT
12-2	.5	.5	.5	FLYING

53.1 TACH 52.0

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12-9	.7	.7	.7	FLYING
12-20	.6	.6	.6	FLYING w/PHIL MILLER - ADD 1 QT - AFTER AT
12-31	-	-	-	1) REPLACED PINS & COVER KEYS ON SLIDED FLY HALLS w/ANBS BOLTS & INSPECTED FOR LEAKS - OK. - 2) CHECKED INDUCTION CHAM FOR CRACKS AS PER SB #82 - OK 3) CHECKED ANT AIR DUCT SPRINK AS PER SB #91 - OK 4) CHECKED OIL STRIPS AS PER SB #95. - THESE APPEAR TO BE PROPER WELDS - OK. 5) CHECK ENGINE MOUNT FOR CRACKS AS PER SB #71 REV A OK
1-1-91	.7	.7	.7	FLYING w/PHIL MILLER
1-4-91	.4	.4	.4	FLYING - ADD. VOLT/AMP REQS.
1-19-91	.1	.1	.1	ADD 1 QT OIL FLYING CHECK VOLT PER ADD. OK.
2-2-91	.3	.3	.3	FLYING

54.8

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2-3	.8	.8	.8	EATON RADIOS. MT. SKY HARBOR ESTATES.
2-10	.6	.6	.6	MANNING - WABASH - WARSAW
2-10	.5	.5	.5	MILWAUKEE CITY - UPSTATE
2-23	—	—	—	COMPLETED ANNUAL INSPECTION AS PER ACCEPTED STANDARDS. TIGHTENED OIL RETURN LINE THAT WAS LEAKING. REPAIRED WHEEL BEARINGS - CHECKED BRAKE PADS PADS GOOD UNTIL 100 HRS. CYCLED BEAM & CHECKED FOR LEAKS. - REMOVED AIR FILTERS & CHECKED SYSTEMS FOR PROPER OPERATION. - ALL AIRLINES COMPRESSOR CHECKED WITHIN 1-2 HRS OF EACH OTHER AT 7841 REPAIRMAN AL BROWN (C# 2435473) 
2-23	.3	.3	.3	CHECKED NOT AFTER ANNUAL OIL.

56.9

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3-10	.4	.4	.4	Fly, Mr.
3-16	.5	.5	.5	Fly w/Don Lambert
3-26	.3	.3	.3	Demo flight
4-3-91			58.1	A/c purchased from G. Gruber by Dick Gerson
				Ferried a/c home to San Jose Ca. without
				incident.
				- only maintenance entries follow
				Done

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4-5 to 6-28-91.	58.1	25.0	83.1	The following was accomplished during the last 2 1/2 months: Airframe: <sup>15</sup> Installed airhorn trim tab, disabled original. Reversed direction of rudder trim tab. Disabled Sic intercom, installed Sveira Radio "Pinetflite" <sup>10</sup> Lock-safteyed all gear microswitches <sup>3</sup> . Installed new pilot seat. <sup>5</sup> Modified Pilot stick. <sup>4</sup> Installed new brake pads (TT=70.1) <sup>2</sup> Installed battery charge jacks <sup>6</sup> Rebuilt Nose Gear Strut - Caking <sup>5</sup> . Regreased brake pads <sup>1</sup>

Time 54 hours



[illegible]

Time 31 hours

[illegible]

Time 14 hours

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1991				
AUG '91	85 to 120 hrs.	@ 8/23/91		1) Autopilot Realigned, pitch axis rate adjusted - fuse replaced in Pitch and roll computers Test flight with STEC engineers - OK <sup>8</sup>
		@ 8/23/91		2) Remove & repaired Starter - sheared woodruff key. Found incorrect key originally installed. Replaced w/ proper key. 6
		@ 8/16/91		3) R/R vacuum pump Airborne P/N 211CC JN 07AG004175 4
		@ 8/16/91		4) Replaced 331-0330-201 Fuel cap Assy - lost in flight
		@ 9-20-91		5) Removed 3M Stormscope 1000 RUS and all racks, cables for sale. unsatisfactory performance. Time 24 hours

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		@9-27-91		Install Strakefin @ Lincoln, CA. 12 (sold Stormscope on 10-3-91)
		@10-16-91		- Overhauled Alternators @ San Jose. 4
		@11-20-91		- Replaced Loran Computer board. - LAC 2 Avionics (factory overhaul)
		@12-1-91		- Installed Argus 5000 DB upgrade. 1 - Installed IFR approach plate holder w/ red light - and refilled brake fluid - Lubed starter bending - raised voltage regulator from 25.2 to 28.3
				Time 21 hours

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12-13	182.0		182.0	Modifications done by Northernair, Arlington, WA - Pulled VMS DPU Board and I/O board for repair. modified mounting bracket. Replaced Voltage Regulator w/new B+C product. Installed Standby Vacuum System. Installed fuel pressure snubber to stabilize pressure indications. Removed right side brakes, left rudder pedals in place. Repaired #2 cylinder baffle (cracked). Replaced right side exhaust spring, cut both exhaust collectors flush w/ carb flgs in closed position. Removed ceramic exhaust wraps on both sides. Complied with S/B #106 to replace elevator



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				<p>hinge bolts w/ AN4-10A. Charged nose gear strut to 180 psi. Installed brake pedal actuator extension per Stoddard Hamilton S/B. Modified gear warning flgs switch to allow 25° flap deployment w/o gear. Soldered all Molex connector pins under panel. Modified fuel vent system to prevent siphoning. Installed cockpit-controllable alternate air. Permanently closed cowl flaps and glassed in for cosmetics. Reduced engine air intake NACA duct by <math>\frac{1}{2}</math> size. Installed new B+C Starter Train by Miller. AIP 536-73-1229</p> <p>assistant: <i>[Signature]</i> OG Time 80 hours (2 weeks)</p>

DATE 19 <u>92</u>	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
3-6-92	207.8		207.8	Performed annual inspection in compliance with standard of practice and Northernair, Inc's Part 43 annual inspection checklists. Installed new BTC alternator linear regulator system.
76/80	<del>Annual</del>	<del>1</del>	75/80	changed oil to Mobil AVI (breakin complete)
77/80			77/80	Bore scoped engine - all OK, all cylinders and exhaust dry, plugs OK (cleaned)
78/80			76/80	Adjusted elevator hinge tension for freedom of movement. Replaced instrument air filter
				Replaced prop O-ring seal. Replaced seat belt.
				Changed tires - Elite Custom II and new brakes.
				Repacked wheel bearings. Repaired aileron

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				trim motor mount (broken). Re-torqued aileron mass balance attachments. <sup>2</sup> Dressed prop. Runup, mag drop, compression check <sup>2</sup> all OK. 3-6-92 Dickson AA# 2340946
TACK 207.8			207.8	Annual inspection completed as per accepted standards & is considered airworthy & approved for return to service of M. Wright AI 699177
				See checklist record in GLASAIR III file. A

DG Time 52 hours

DATE 1982	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
3-10	210.0		210.0	A/R starter contactor - fused during kickback. Installed separate, redundant Magnetos switch to ground right mag during cranking. <sup>Repairs completed at 3</sup> <sub>may airports by me</sub>
11-24	240.0		240.0	A/R right wing fuel vent line (leak). <sup>10</sup> A/R Gear Hydraulic fitting (leak) in system downside manifold (supply/return) <sup>4</sup> - Refilled Hydraulic pump reservoir - Refilled brake reservoir. - changed oil and filter. - Adjust nose gear uplock microswitch. - Repositioned Side Brace Bushing & Stake <sup>than</sup> - Installed custom built close tolerance elevator hinge Assy's <sup>4</sup> <sub>REPLACE ORIGINAL ASSY'S (WORN OUT)</sub> .12



DATE 19 <sup>93</sup>	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
				per S/H recommendations.
1-4	260.6		260.6	Performed annual inspection complete this date per standard aircraft practice and in compliance with Stoddard Hamilton Service Bulletin Part 43 annual checklist. <sup>20</sup>
				Pilot filter NA (changed 11-24-93 @ 240 hr).
				Installed aftermarket electronic ignition system replacing RT mag. <sup>30</sup> Adjusted elevator pushrod clearance to fix noise. Installed 12V power supply to power CD/Audio. <sup>6</sup> Replaced ALT belt. <sup>8</sup> Refilled all hydraulic reservoir and checked for leaks. Runways and
Time 38 hrs				Time 65 hrs

ANNUAL



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1993				<p>compression check all OK</p> <p>RA # 2340946</p> <p>75 — 75</p> <p>74 — 78</p> <p>76 — 76</p> <p>80</p>
				<p>1/24 ANNUAL - See SH Part 43 checklist and file this date.</p> <p>Aircraft is found to be in safe operating</p> <p>Condition O.M. Wright AT 699177</p>

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1993	275.2		275.2	<p>Mods performed by AIRWORKS, inc + me.  Larry Lyntecum / Larry Japhis @ Paso Robles  Installed 10"x20" access panel in  top boot cowl for systems access.  Built plenums on both air vents, both  fed from left vaca duct. Right vaca  duct <sup>NOT</sup> closed off.  Removed Aux tank entirely, along  with associated plumbing + wiring.  Time asisting 80 hours</p>
				<p><i>[Signature]</i> IA* 23409416</p>

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7-19	285.0		285.0	Replaced brakes, replenished all fluids, changed batteries to lighter weight B+C batteries. Saved 28 lbs in weight. 12
				Relocated Victor Microsystems box(s) for access. 20
				Installed MAC servo for cabin heat 4
				Installed new pads for Bose headsets. Koren #A 2340946
8-1	295.0		295.0	Built and installed 28v to 24v converter to power Electronic Ignition system 25 Fixed leaking hydraulic fitting in Tare 61 lbs

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1973				gear manifold block (pull & replace) 10
				Installed GPS 600 (Northstar),
				replacing LOAN MIA. Installed Attitude
				encoder for GPS interface. 12
10-1	346.5		346.5	Upgraded Vision Microsystems EPI 800
				to VM1000, including new digital
				RPM sensor. 12
				Built and installed New right side
				panel to accommodate VM1000. Relocated
				and removed gauges as needed. 30
				Installed digital advance indicator
				for electronic ignition system. 20
Time 94 hrs				

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1993				Upgraded panel wiring and connector strategy for easy panel removal on right side. (Re-wired Panel) 40
				Installed new main lines - Flite Custom II
				Characterised and calibrated electronic ignition advance curves. (See GII file)
				Adjusted Fuel pressure to $\approx 20$ lbs
				adjusted idle mixture as needed.
				Changed oil & filter - no contamination
				→ Installed one Quart Microlon <del>Flare</del> #2340946
10-3	346.5		346.5	Installed new factory reman Bendis engine MAG on left side - work done by Wright Bros Aviation - <del>Wright</del>
				Time 56.40 hrs



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11-12	350		350	<p>Completed extensive test series to equalize (normalize) EGT, mixture spread. Installed cooling inlet ramps to reduce EHT.</p> <p>Revision reamed all injector nozzles to match peak points. (See file data)</p> <ul style="list-style-type: none"> <li>- R&amp;R EGT probes on right side to equidistances<sup>60</sup></li> <li>- Installed new front (nose) tire. <sup>4</sup></li> <li>- R&amp;R New front nose crankshaft seal replaced alternator belt <sup>12</sup></li> <li>- checked all hydraulics. <sup>2</sup> Reconnected com 1 coax to belly antenna. <sup>4</sup> Increased cold air supply to cabin heater<sup>6</sup>. New air filter</li> </ul>

Time 88 hours

DATE	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
19 <u>93</u>				Adjusted vacuum regulator up. Washed q/c - test flows on 11-20-93.
12/20	374.5			Repaired mag block gasket leak <sup>4</sup> , re-located cabin heat supply hose to stop chafing <sup>2</sup> , installed APU plug in right seat back <sup>6</sup> , built and installed a 24v-12v power converter to run all 12v aircraft appliances. <sup>20</sup> Calibrated & seated MAP sensor box on electronic ignition system (installed new MAP sensor valve). <sup>8</sup> Replaced CP/stereo power and audio cables. <sup>8</sup> Re-installed Factory upgraded Bose Headsets. Washed engine, changed oil & Time 50 hrs

DATE	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
1993				<p>filter. 10Qts CASTROL Syntek 5W50.</p> <p>compression ck:</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>75 ————— 76</p> <p>75 ————— 76</p> <p>* 70 ————— 76</p> </div> <div style="text-align: center;"> <p>↑</p> <p>80</p> </div> <div style="margin-left: 20px;"> <p>cleaned + gapped plugs:</p> <p>Tops: 0.035"</p> <p>Bottoms: 0.018"</p> </div> </div> <p>* leakage audible @ oil filler cap only.</p> <p>- Borescope shows no wall damage.</p>
12/21/93			374.5	<p>T.T. Aircraft Inspected for Annual &amp; found to be in Airworthy Condition &amp; is approved for return to service AT 699177</p> <p style="text-align: right;">A.M. Wright</p>

Time 4 hrs

DATE 1974	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
2-10	386.0		386.0	<p>Built and installed "autopilot disconnect alarm" recommended by STEC factory.</p> <p>Installed autopilot sensitivity control in cockpit console for high altitude cruising. 40</p> <p>Replaced VM1000 OAT probe, installed new one with grounded case. 41</p> <p>Installed Ryan AT8000 TCAD system with audio and visual alerts. TCAD antenna installed inside baggage compartment (on ceiling). 24</p>

Time 68 hr

DATE 4/19/94	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
2-18	388.00		388.00	Replaced left elevator hinge bearing due to Vibration wear. Used high strength LHA series bearing for load reversal duty. 12
	391.00		391.00	Installed "starter energized" light over START SW position. 4
				R/R VM1000 I/O board for static damage 15 → Re-installed with Aluminum housing/grounded Adjusted Voltage Regulator to 29.6v in flight reading.
			10 →	Installed new VM1000 Amp sensor as Alternator Load meter. Test flew - all OK

Time 41 hours

*[Signature]* #2340941  
2-23-94



DATE 19 <u>94</u>	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
3-18-94		<u>410.0</u> hours		<p><del>TOP overhauled</del> this date. All cylinders removed.  cyls. honed, refaced valves &amp; seats. Installed  3 new valve valves. Lapped valves &amp; leak checked.  Re-assembled with new rings, Gaskets &amp; seals.  all work done per Lycoming Manuals. Run up  &amp; leak checks OK. Serviced w/ Aeroshell  150 Mineral oil. Brian King A&amp;R 80580664  Time assisting: 30 hrs</p>
	<u>TISN</u>		<u>TIST</u>	
	425.0		15.0	<p>Changed oil &amp; filter. No metal found in filter.  All gears OK. Removed A+S Breather-  separator. Replaced w/ DG separator on firewall.  <u>Balanced injector flows for even peaks (peak)</u></p>
				Time 40

DATE	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
1974				
CHOIRON FUEL CONTAMINATION MAY 1974				simultaneously). <sup>20</sup> Installed cooling inlet ramps and baffled cylinders for even cooling @ cruise ( $\approx 375^{\circ} \pm 10$ ). <sup>20</sup>
5-15		442.2	<del>442.2</del>	Began numerous test flights investigating sudden increase in Oil Temp ( $230^{\circ} \sim 245^{\circ}$ ). Excessive blowby / oil consumption. Crankcase pressure measured by Arispaal indicator @ 160 mph equivalent pressure. Changed to AV-1 oil for lower temps. <sup>20</sup>
7-8		446.2		
7-11		451.0		- A/C grounded due to Choiron Fueling accident - overtemp induced damage. Time 60 hours

DATE 19 <u>94</u>	RECORDING TACH TIME <u>795N</u>	TODAYS FLIGHT	TOTAL TIME IN SERVICE <u>795N00H</u>	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
				Damage Summary: 3rd cylinder walls, crossed piston faces, all rings stress- relieved / no tension. Bearings show evidence of detonation. Cam spalled on 2 lobes, two spalled lifters.
9-21	451.0		0	Major overhaul complete. A/C test flown & returned to service - See file for records. Built by me under supervision of ORION KING 180
11-15	462.0		11.0	Installed emergency free-fall gear system w/ Air Start assist on Nose Gear. Ymax Deployment = 110 mph FAS demonstrated. 30
				Time 260 include OH <u>Done</u> 175

WRIGHT BROTHERS AVIATION

2660 JOHN MONTGOMERY DRIVE

San Jose, CA 95148

C.R.S. No \_\_\_\_\_

9-21-94 Zero Time Major Overhaul  
Aircraft N 90GG Glasair III  
Hobbs 451.0 TTSN  
Engine: Lycoming IO540-S1A5 modified  
Serial# L-12944-48A

Major overhaul performed this date in accordance with Lycoming Engine Overhaul Manual and all applicable S.B.'s and A.D.'s to date

Engine disassembled, all parts cleaned and inspected. Crankcase stress relieved, zyglod, resurfaced and line-bored by Nickson Machine, inc. of Santa Maria, CA. Crankshaft inspected and magnafluxed. Counterweights re-nitrided and re-bushed. Main and rod journals turned down 0.006" and polished. Con rods part no. LW 10646 cleaned, inspected and rebushed.

New Air Support International camshaft # AS19340 and reground lifter bodies installed with FAA approved Aerolube Process applied. New Ken Hatfield roller-rockers installed with new rocker shafts and custom fit pushrods. New Lycoming lifters in cyl's #3 and #5.

All new Lycoming cylinder assemblies part # 05K21118 installed. Cylinders custom honed, ported and flow-balanced by Ly-Con, inc. of Visalia, CA. All valves custom seated by Ly-Con. Experimental 10:1 compression, high-silicon forged pistons with anti-scurf skirt and ceramic piston top coatings. Hot shit. New piston pins and plugs, too.

Engine re-assembled with all new gaskets, new con rod bolts and nuts, and new main and rod bearings. Crankshaft gear part no. 13S19648 replaced in accordance with Lycoming AD# 91-14-22, S.B.# 475 Rev A. New oil pump drive gear and aluminum driven gear installed. NOTE: Rebuilt 130T STD 2209

Bendix fuel injection system inspected, overhauled and flowed by Accessories Connection of Sacramento, CA. Romet rotary fuel pump disassembled, cleaned and inspected.

Magnetos disassembled and inspected. Left mag TTSN: 104.5. Right mag TTSN: 191.0. Electronic ignition system removed. All new long reach plugs installed.

Fuel filter canister cleaned and filter replaced. New exhaust header support springs and mount hardware installed. New Barry engine dynafocal mounts installed. New alternator belt.

Aircraft run-up, leak checked, and returned to service.

Signed: Brian King  
Brian King, A&P 80580664

Signed: Dick Gossen  
Dick Gossen, Owner and Experimenter

*All work performed by me under supervision  
of Brian King*

*Time 8 1/2 weeks - approx 180 hours*

ALTIMETER TESTED TO 20000FT  
IAW FAR 43 app E ON 1 MAR 95  
SIGNATURE [Signature]  
NORTHCOAST SERVICES WR3R955L

I CERTIFY THAT THE ALTIMETER STATIC SYSTEM & ALTITUDE REPORTING TESTS REQ BY FAR 91.411 & THE TRANSPONDER TESTS REQ BY FAR 91.413 HAVE BEEN PERFORMED. N 3066  
ALTIMETER TESTED TO 20000 FT.  
IAW FAR 43 APP E ON 1 MAR 95  
SIGNATURE [Signature] DATE 1 MAR 95  
NORTHCOAST SERVICES CRS WR3R955L

Also done during engine overhaul:

Replaced engine fuel filter canister + top seal. Re-located fuel flow transducer to firewall. Replaced fuel hose from injector body to spider.  
Re-designed entire engine soffit system



DATE 19 <sup>95</sup>	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE SMOH	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
1/26	473.0		22.0	<p>Performed annual inspection this date. <sup>20</sup></p> <p>Installed new brakes, re-surfaced discs (rotors). Re-checked engine timing, compression OK (22 SMOH). Drained oil &amp; re-filled w/ Phillips 20-W50 Type "M". No squawks.</p> <p>A/C inspection completed and returned to Service - work performed: <u>Approved:</u></p> <p><i>[Signature]</i> RA # 2340946</p>

1/26/95 473.0 I certify this aircraft has been inspected in accordance with the scope & detail of FAR 43 Appendix D & found to be in condition for safe flight Brian King AS 80580664 Time 20

DATE 19 <u>95</u>	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
3-2	475.0		24.0	Modified engine cooling baffles, sealed all rad. Installed New BTC 40 amp 28v Alternator and new LS-1 Linear regulator. Installed standby Bus-voltage DMM w/switch. Re-wired center console - installed D-sub 37 single-point disconnect. Installed Digital Analog clock. Installed fire- skere on Nose gear gas strut. <del>Manex</del> 2/2/95
3-4	475.0		24.0	Installed + Slight tested Bottom TCAD antenna and antenna diplexer module. Replaced leaking elbow on Right main actuator. Modified center console + seat pans for easy removal.

Time 81

DATE 19 <sup>45</sup>	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
3-13	476	<del>25.0</del>	25.0	R+R right lower Panel - created and installed "Master Essential AVIONICS" bus for ground and emergency - airborne use. <sup>30</sup> Installed on-ess switch for Bose Headsets. <sup>4</sup> Re-wired fuse panel for easy removal. <sup>15</sup> Documented major A/R bus wiring map. <sup>8</sup>
3-31	479			Installed Removable INTAKE RESTRICTIONS for CHT $\approx$ 375 °F <sup>10</sup>
4-7-95	482.0			AD 95-07-01 is N/A per parts installed @ overhaul. Rod Bolts are SL 75060 Avcon Inconel 01-673151-14A. Brian King AEP 80580664
Time 67				Continued →

DATE 1975	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
4-14-95	483.2			Removed #2, #4 & #6 cylinders for inspection of Rod Bolts due to parts possibly defective. All bolts are stamped SN75060. Cylinders re-installed per Lycoming manuals. Run up, leak check & flight check OK. Brian King AFB 80580664
4-14	483.2			Removed and inspected thermostatic bypass valve in compliance w/ Lycoming mandatory S.B. # 518A. Valve part # 53E19600 ser # 1963 verified OK. Done
5-4	495.7			Replaced GEAR power pack w/ Newer type. Fritall in-line Hydraulic filter as per. S.H. SK (Bul. 15
5-25	495.7			Converted Brakes back to original (organic) configuration. Installed new PADS AND DISKS. Removed brake pedal extender

Time 33 hours



DATE 19 <u>95</u>	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
				Re-calibrated and serviced Bendix Injector Servo To reduce max fuel flow. <sup>6</sup> Lapped idle cutoff valve. Replaced forward engine baffles. <sup>10</sup> Changed oil - 15W/50-8 QTS. Rebuilt 28-14v 8 converter damaged by inadvertent short/circuit. Re-built nose auto-extend bell-horn (to stiffen) Increased Gas strut lever arm. 8
7/22	517.0		66.0	changed oil/no filter - capped Tach Drive <sup>2</sup> / <sub>3</sub> 15W/50 13 QTS. Installed diodes on all major Relays. Isolated 14v bus. 6
12/28	555.0			Completed extensive inspection + modification as per affidavit attached next page <sup>100</sup> Time 40 min #2310946



1996 Annual Inspection  
Completed 12/28/95

Record of inspections and modifications performed during the period beginning October 1, 1995 and ending this date, 12-28-95, in preparation for Annual Inspection due January 26, 1996

Removed KX 155 Navcom and CDI for resale. Relocated Strikefinder to left panel side. Smartcom upgrade performed by Advanced Avionics, inc. in Lincoln, CA, including remote, digitally tuned Becker radio-located in forward hatch. Relocated GPS to center stack.

Removed right side panel entirely; cleaned up wiring significantly. Entire harnesses replaced and/or re-routed. Avionics master relay assy. relocated to fuselage sidewall. RF relays and autopilot steering relays relocated to forward hatch.

Installed new DRE Communications, Inc. stereo intercom with automatic ATC in-flight voice recorder in center console. Installed new "dash-mounted" automotive CD/FM Stereo unit in right panel (original location of Northstar GPS-600, now in center stack). Reconfigured BOSE headsets for Stereo. Re-wired entire audio harness to eliminate ground loops and other subtle problems. Relocated BOSE control heads to rear sidewall.

Installed Angle-of-Attack indicator system using differential pitot input method. Installed indicator head in place of original 2" G-meter.

Installed 28 volt, 14 volt, and GND Bus bars in floor of fwd hatch. Re-routed important audio ground wires and chassis connections to common point.

R&R fuel pressure sender/transducer with new unit (contaminated).

Removed annunciator lights at top of panel; relocated in cluster in right panel. Installed annunciator "audio disable" switch and appropriate warning light.

Replaced entire glareshield with lighter, lower profile unit laid up using old g/s as a mold.

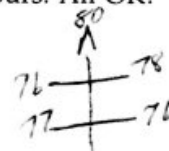
Re-designed door opener-gas spring assembly to eliminate deformation of door shell when closed. Installed new gas springs of appropriate stroke and strength.

Removed and re-sealed engine pushrod tubes on cyl's #1,4,6 to stop minor leaks. Replaced #4 pushrod tube (bent lip). All engine bolts and cyl tiedowns re-torqued per Lycoming specs by Randy @ Wright Brothers Aviation.

Changed oil and filter, inspected filter contents---(clean). Checked compression...all above 76/80. Consistent with low oil consumption observed (1:8).

Test flight to Baja, SLC, and EDW...15 hours. All OK!

Signed:



Dick Gossen, Owner and Experimenter  
FAA RA#2340946

See continuation dated 1/8/96

Time: 12 weekends, many evenings  
~ 180 hrs

DATE 19 <sup>96</sup>	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
2-8	563.3		112.3	Removed & re-wired Pilot side Panel for better access and Reliability. <sup>20</sup> O/H Flight Director, certified & yellow tagged by First. Repair Soc of San Diego. <sup>2</sup> Installed new T.A.S. gauge in place of original. <sup>1</sup> Re-located Airbottle to right side. <sup>6</sup> Relocated First. Air Filter for access. <sup>4</sup> Removed elevator pitch trim relay bank wired direct for finer control. <sup>18</sup> Installed panel-mount O2 system w/ flow meters. <sup>12</sup> Installed new BOSE Series II headset. <sup>2</sup> Ready for Inspection after oil & filter change by Wright Brothers: <del>_____</del> 2/26/96
2/27	Sigworth Sumner			<del>_____</del> AT 566674996 2/22/96

Time 65 hrs

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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
2-26-96	563.3	F		certify this AIRCRAFT has been inspected in accordance with the Scope & Detail of FAR 43 Appendix D and is found to be in Airworthy condition for safe flight. <del>Signature</del> AT 566674996
2-28	563.3			Replaced elevator trim turnbuckle. Dressed Prop Replaced ELT Battery 2-28 6
3-15	563.3			Installed Boots on Straps. <sup>2</sup> Replaced BT Main Gear up-look switch w/ Milspec unit. <sup>4</sup> Replaced all engine baffles w/ new silicone (Red). <sup>6</sup> Replaced nose gear front hinges. <sup>4</sup> Installed cooling air duct for ALTERNATOR. <sup>2</sup> Changed oil & filter. <sup>1</sup>
5-1	584.2			Changed oil & filter. <sup>1</sup> time 26 hrs

Annual  
Inspection

DATE 1996	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
1-20	615.3			changed oil <del>filter</del> check engine. <sup>2</sup>
7-5	646.0			changed oil + filter - Rewired connection block wired Pilot Stick - (Intermittent A/P) <sup>8</sup>
		inlet centering fiberglass MODS		Installed BIC Filter adapter. <sup>16</sup> Installed Pulse-lite System <sup>12</sup> - Rewired Top fuel baffles <sup>4</sup> Replaced A/Elevator outer + center bearings. <sup>8</sup>
			12/20	Full inspection + lube retract system. Added Strut Seal to nose strut + mains. <sup>4</sup>
4/12/97	682.7		4/12/97	I certify this aircraft has been inspected in accordance with FAR 43 App. D & is considered airworthy + approved for return to service A. Mc 12 right AT 699/77

Time 54



DATE	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
JAN 97 - 1997	698.7			charged oil & filter / filter check. <sup>2</sup> New Airline Service
April 24, 1997	698.7			OH Argus moving parts / new Lithium Battery. <sup>6</sup> New tires and brakes. <sup>40</sup> New HS Axle bolts + nuts. <sup>2</sup>
				OH oil cooler. <sup>4</sup> New air/oil separator. <sup>4</sup> 18T pulley B. <sup>4</sup>
				Pelo air duct for fuel filter. <sup>4</sup> New AF filter for ALT. <sup>2</sup>
				OH Propeller. <sup>8</sup> Pelo firewall (misc) items
				Installed D.I.S. dual ignition w/ dual electric bus. <sup>40</sup> Extended lite check to CABO. <sup>2</sup>
				Installed DVM for Bus 1/2 monitor. <sup>4</sup>
AUG 97	698.0			Installed New Check Battery clips - NMS 10000 <sup>2</sup>

CERTIFY THAT THE ALTIMETER STATIC SYSTEM & ALTITUDE REPORTING TESTS RQD BY FAR 91.411 & THE TRANSPONDER TESTS RQD BY FAR 91.413 HAVE BEEN PERFORMED. N90666  
 ALTIMETER TESTED TO 20000 FT  
 BY FAR 43 APP E ON 14 APR 97  
 SIGNATURE [Signature] DATE 14 APR 97  
 NORTH COAST SERVICES CRS WR3R955L

Time 134-



HARTZELL PROPELLER FOR A/C N90GG

DYNAMICALLY BALANCED PROPELLER TO ENGINE IN ACCORDANCE  
WITH CHADWICK HELMUTH INSTRUCTIONS AW-9511-2.

FINAL I.P.S. .031

A/C N# N90GG

TACH TIME: 707.0

*note (4/13/97)*  
**MAINTENANCE RELEASE**

THE AIRCRAFT AND/OR COMPONENT IDENTIFIED ABOVE WAS REPAIRED IN ACCORDANCE WITH CURRENT FEDERAL AVIATION ADMINISTRATION REGULATIONS  
AND WAS FOUND AIRWORTHY FOR RETURN TO SERVICE. PERTINENT DETAILS OF THE REPAIRS ARE ON FILE AT THIS AGENCY UNDER WORK ORDER

NO. **CAR-3698**

DATED **06/11/97**

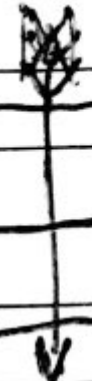
SIGNED \_\_\_\_\_

*[Signature]*  
AUTHORIZED INDIVIDUAL

**U.S. PROPELLER SERVICE OF CALIFORNIA**  
**STOCKTON METRO AIRPORT • 1911 E. SIKORSKY • STOCKTON, CA 95206**  
**REPAIR STATION #UIHR910L TEL: 1-800-749-PROP**

DATE	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
1998				
	732.0	Spring		1998 annual (progressive)
	(beginning tachtime)			- Replaced entire electronic ignition w/ Electroair System with manual timing adjust, pilot controlled. <sup>40</sup> installed Master "A" Bus disconnect. <sup>6</sup> Removed B+C filter adapter. <sup>2</sup> Replaced defect instrument air filter. <sup>1</sup> Complied w/ Precise Elite Bulletin 5VS973 (defective shuttle valve). <sup>1</sup> C/w Standard S.B. 150 - fuel filter canister
76		74		- Upgraded Nothoten to M3 - Approach - new L. BATT. <sup>8</sup>
73		75		- Upgraded TCAD AS 8000 - New System, new L. BATT. <sup>6</sup>
76		74		Revised nose gear scissors, cut doors. <sup>4</sup> Overhauled left main MAC Servo. <sup>2</sup> Overhaul HSI - see yellow tag. <sup>2</sup>
	80			- Inspect MAIN + NOSE GEAR mechanisms <sup>1</sup>
		765		→ changed oil/filter/inspect filter - clean <sup>2</sup>
				- New Brakes installed <sup>2</sup> Time 78 hr

DATE	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
1998				
Annual	765.2		2/13/98	I certify THIS AIRCRAFT HAS BEEN inspected IAW FAR 43 APP D AND IS FOUND TO BE IN AIRWORTHY Condition. FA # 305641678
Nov/98	799.5		→	Charged oil - no filter (Note: charged oil and filter approx @ 765 hours, <del>but did not enter in log</del> ) (R/A) Installed (2) newly overhauled Ignition Systems <sup>8</sup> (R/R) Replaced "B" batteries, date coded JAN'98. 2
12/98	809.8			New TIRES / clean + repack bearings / New brakes New Door Latches <sup>6</sup>
3/99	825.0			Charged oil + filter - inspected filter <sup>2</sup> Hi Temp Replaced Nose Tire + Tube - cleaned / repacked bearings <sup>4</sup> Grass
				Time 23 hrs

DATE 19 <u>99</u>	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
5/15/99	854.0			- changed oil - no filter. Re-routed Breather Repaired reservoir can. Replaced Nose Bearing
	75		77	polished RACES - coned, no pits. Used std bearings
	76		76	- Re-oiled ALL SCISSORS. Tighten Nose gear DRAG links. Lube Prop. Filled Gear Pump w/oil
	75		75	I CERTIFY THIS AIRCRAFT has been inspected Z.A.W. FAR 43-APP D AND is found to be in
9/5/99	889.0	80 ANNUAL INSPECT		AIRWORTHY condition <del>W. J. [Signature]</del> #3086/169
9/6/99	889.0			- changed oil, filter, inspected filter OK <sup>2</sup>
2/8/99				- Removed + cleaned Top + Bottom plugs <sup>2</sup>
1/00	916.0		875 hrs	Reamed exhaust Guides # 2, 4 <sup>8</sup> Remove NSD360/INSTALL Sandel 3308, King KG10

June 68 hr




DATE 2000 12	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 MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
4/3	935.8			New TIRES/BRAKES <sup>3</sup> Reamed exhaust guides <sup>#</sup> 1, 3, 5, 6, 2, 4 Repack bearings/replaced one. Oil change
9/10	990.0	oil/filter		Replaced "A" and "B" Batteries 4/15/00 <sup>4</sup> New Instr Air Filter Oil change/filter <sup>2</sup> - Overhauled System B Ignition Horns - See notes in blue book <sup>8</sup> changed all plugs to NGK 27R. Overhaul Right Brake <sup>2</sup>
7	80 A	74	→	New BRAKE Pads New Display for Xpndr
11/5	76	78		Change oil injector filter Filter clean
76	78			PERFORMED GERM swing Normal and emergency
			4	PERFORMED Comp ✓ #1 <sup>7</sup> / <sub>80</sub> #2 <sup>7</sup> / <sub>80</sub> #3 <sup>7</sup> / <sub>80</sub>
			(assist)	#4 <sup>7</sup> / <sub>80</sub> #5 <sup>7</sup> / <sub>80</sub> #6 <sup>7</sup> / <sub>80</sub> Checked Flight Controls For Proper operation. →

time 45 hr



DATE 2000 29	TAC TOTAL TIME IN SERVICE	REFERENCE OF MAJOR REPAIRS AND MAJOR ALTERATIONS TO FAA FORM ACA-337 BY DATE, OR TO THE WORK ORDER BY NUMBER AND THE APPROVING AGENCY.
		I certify This Aircraft engine and Propeller has been inspected IAW FAR 43 App 'D' and if found to be in Airworthy Condition
		<i>[Signature]</i> FA 30564/678
		MAJOR MOD
Jan 30	1017	<u>Re-reinforced inner Gear box sub<sup>20</sup></u> , O/H Hydraulic cylinders (main) w/ new style pistons/same <sup>4</sup> . Gw gear mods - Side brace Studs, HS axle bolts <sup>10</sup> installed Gear Taxi Lights <sup>8</sup> . Replaced All hoses (main gear) Re-rig Gear <sup>10</sup>
Jun 30	1051	- oil change - <del>oil</del> filter checked - clean <sup>2</sup> . <u>Replaced entire exhaust</u> <u>system</u> , New GASKETS AND HDWC. <sup>10</sup> - Hydro Static Test O <sub>2</sub> Bottle due 6/2011

Time  
6/2011

DATE	TOTAL TIME IN SERVICE	REFERENCE OF MAJOR REPAIRS AND MAJOR ALTERATIONS TO FAA FORM ACA-337 BY DATE, OR TO THE WORK ORDER BY NUMBER AND THE APPROVING AGENCY.
2001		
OCT 15	1069	Installed New CI 122 COMATEVA on Belly Panel - improved gnd shld. New Mic - Continant Gyro installed 10
OCT 30	1080	New Tires + BRAKES Repack bearings (one race polished) Swung GEAR/check rigging - All OK Flushed/bled both BRAKES Clev Pads # 066-10500 8
NOV 19	1082	I certify this a/e, engine + propeller have been inspected 19W FAR 43 App D and is found to be in airworthy condition ARP 605660203 Yorktown, VA
	75	74
	76	76
	73	74
		12/7/2001 - Replaced RT outside elevator hinge + bearing (LSS-A) <del>11/1/2002 - OH</del>

time 24 hr

DATE  
2002  
19TOTAL  
TIME IN  
SERVICEREFERENCE OF MAJOR REPAIRS AND MAJOR ALTERATIONS TO  
FAA FORM ACA-337 BY DATE, OR TO THE WORK ORDER BY NUMBER AND THE APPROVING AGENCY.

2002 1/5/02 Replaced all 12 hydraulic lifters w/ Lycoming part # 78290  
1089.0 Inspected and re-installed roller rocker arms, re-clocked as needed  
Installed hi intensity anti-collision lights in cowl

New Valve clearances, cold:

CYL #	1	3	5	2	4	6
INT.	.043	.051	.035	.064	.054	.072
Exh.	.039	.063	.063	.043	.053	.063

← R → ← L →  
Replaced A-BUS MAIN BATTERY w/ Tempest TR18-12 (\*2), BATT-TR18-12  
OH. weldon Pump part # C8100 F Serial 55390 A

→ 4/1/2002 Top Overhaul - see work order Lycon #50943  
New valve clearance values listed:  
All work performed by me 4/1/02 Time 52 hrs.



## Un-necessary Top Overhaul 2002

TTAF 1104.0 TTSMOH 653.0

In the process of troubleshooting a 'single cylinder miss' on take-off in cold conditions, I erroneously suspected a sticking valve. The symptom was transient, lasting only seconds – so I was unable to determine which cylinder was misbehaving. After a few seconds at full power, the problem disappeared and the engine performed normally until the next really cold morning toak-off. After exhausting every other possibility, including replacing the injector spider, the injectors themselves, removing the electronic ignition and replacing it with brand new mags and harnesses, and replacing all the intake riser gaskets and all the hydraulic lifters, I deduced the problem had to be a faulty rocker arm. Determined that the rocker arms in the engine were *non-standard* - Replaced all rockers with Lyc Part # 78290

Problem solved

Note: This little adventure was pursued off-and on for at least three years.

DATE	A. D. NUMBER	TOTAL TIME IN SERVICE	AIRWORTHINESS DIRECTIVES CHRONOLOGICAL LISTING OF COMPLIANCE AND METHOD OF COMPLIANCE.			
2002						
7/15		1118.5	- New Nosewheel Tire and Tube <sup>4</sup> / <del>Bearing</del> / <del>Balls</del>			
			- changed oil - no filter Aeroshell Oil 100 <sup>1</sup>			
8/12		1142.0	Installed ADA system <sup>16</sup> - cleaned up left panel inst.			
			- Replace Sander Projection Bulb <sup>1</sup>			
9/1		1150.0	changed oil & filter <sup>2</sup>			
11/1		1175.0	changed oil <sup>1</sup>			
<hr/>						
			<del>DEC 2002 - Progressive Annual</del>			
			⇒ (1104) - Top overhaul complete 5/27/02 - All new valves pistons & guides, New Hydraulic Lifters, New Rocker Assy's. FACT. OH fuel distribution system w/ new injectors.			
		(1198)	Compression ok complete	75	80	77
			Inspected FWF OK	77		76
			Time 33 hr	78		76



DATE 2002 12	A. D. NUMBER	TOTAL TIME IN SERVICE	<b>AIRWORTHINESS DIRECTIVES</b> CHRONOLOGICAL LISTING OF COMPLIANCE AND METHOD OF COMPLIANCE.
		(1202)	Inspected, re-rigged landing gear system. Re-installed emergency gear down system, Chk OK. 6 Inspected Tail cone, all pushrods AND bellcranks <sup>2</sup> <del>Installed new nose gear uplock microswitch</del> Tightened Nose Gear drag link ATTACH bolts (Fuselage) <sup>1</sup> — <del>I have</del> I certify this AIRCRAFT AND engine have been inspected in accordance with FAR 43, App D <sup>2</sup> AND is found to be in AIRWORTHY condition Yorktown Sands AIP 605660203 12/23/2002
12/31		1205	- Change oil & filter <sup>2</sup>

time 13 hr

DATE	TOTAL TIME IN SERVICE	<p align="center"><b>MANUFACTURERS MANDATORY SERVICE BULLETINS</b>  <b>CHRONOLOGICAL LISTING OF COMPLIANCE AND METHOD OF COMPLIANCE.</b></p>
2002		
12/31/2005		<p>Note: Total P.I.C. N9066 for Dick Gosser  as of <sup>1998</sup> <del>this</del> date = 1147 hours. I certify this  to be true on 2/15/2005</p> <p align="right"><i>[Signature]</i></p>
		<p>According to onboard engine analyzer w/ recorder:  as of 2/15/2005 TT = 1205 hours  hours flown by G. Gruber = 58  (- original builder)  TT flown by O. Gosser 1147 hours in N9066</p> <p align="right"><i>[Signature]</i></p>

Glasair III - TT MM = 1147 as of 12/31/2005

DATE 19__	TOTAL TIME IN SERVICE	EQUIPMENT ADDITION, REMOVAL OR EXCHANGE  ITEM — MFG NAME — MODEL — SERIAL	
3-24-40	11.6	REPLACED PROP w/ HARTZELL MOD # HC-24K-1BF HUB SER #1603 BLADE #① H10455 #② H10461	<input type="checkbox"/> Addition of Optional Equipment <input type="checkbox"/> Removal of Optional Equipment <input type="checkbox"/> Addition of Required—Exchanged for Optional <input type="checkbox"/> Removal of Required—Exchanged for Optional
4-16-47	883.0	OH Prop - American Propeller Sec	<input type="checkbox"/> Addition of Optional Equipment <input type="checkbox"/> Removal of Optional Equipment <input type="checkbox"/> Addition of Required—Exchanged for Optional <input type="checkbox"/> Removal of Required—Exchanged for Optional
			<input type="checkbox"/> Addition of Optional Equipment <input type="checkbox"/> Removal of Optional Equipment <input type="checkbox"/> Addition of Required—Exchanged for Optional <input type="checkbox"/> Removal of Required—Exchanged for Optional
→ See correction entered in Pilot Logbook #4 this date 2/15/2005 to include this error and further accumulated errors of similar kind. <i>Konrad</i>			<input type="checkbox"/> Addition of Optional Equipment <input type="checkbox"/> Removal of Optional Equipment <input type="checkbox"/> Addition of Required—Exchanged for Optional <input type="checkbox"/> Removal of Required—Exchanged for Optional
			<input type="checkbox"/> Addition of Optional Equipment <input type="checkbox"/> Removal of Optional Equipment <input type="checkbox"/> Addition of Required—Exchanged for Optional <input type="checkbox"/> Removal of Required—Exchanged for Optional

DATE 19__	TOTAL TIME IN SERVICE	EQUIPMENT ADDITION, REMOVAL OR EXCHANGE			
		ITEM — MFG NAME — MODEL — SERIAL			
	NOSE  MAIN	Bearing 08125	Race <del>08231</del> LM67010	<input type="checkbox"/> Addition of Optional Equipment <input type="checkbox"/> Removal of Optional Equipment <input type="checkbox"/> Addition of Required—Exchanged for Optional <input type="checkbox"/> Removal of Required—Exchanged for Optional	
		08125*2-629	08231*2-629	<input type="checkbox"/> Addition of Optional Equipment <input type="checkbox"/> Removal of Optional Equipment <input type="checkbox"/> Addition of Required—Exchanged for Optional <input type="checkbox"/> Removal of Required—Exchanged for Optional	
	BRAND PADS RIVETS	RAPCO #RAP66-105 Cleveland 066-10500	spruce #60-105 RAPCO #RA105-00200 spruce #105-2	<input type="checkbox"/> Addition of Optional Equipment <input type="checkbox"/> Removal of Optional Equipment <input type="checkbox"/> Addition of Required—Exchanged for Optional <input type="checkbox"/> Removal of Required—Exchanged for Optional	
	NO FOR FURTHER NEW	NO MORE ENTRIES THIS LOGBOOK AS PER NATS		<input type="checkbox"/> Addition of Optional Equipment <input type="checkbox"/> Removal of Optional Equipment <input type="checkbox"/> Addition of Required—Exchanged for Optional <input type="checkbox"/> Removal of Required—Exchanged for Optional	
		NO MORE ENTRIES THIS LOGBOOK AS PER NATS		<input type="checkbox"/> Addition of Optional Equipment <input type="checkbox"/> Removal of Optional Equipment <input type="checkbox"/> Addition of Required—Exchanged for Optional <input type="checkbox"/> Removal of Required—Exchanged for Optional	