

ERA25FA020

MAINTENANCE LOGBOOK EXCERPTS



Aircraft Record General Information

Manufacturer GILBERT A. GEISZ Model LANCAIR 360
Serial 660-320-404FB Registration Number N510G
Date of Manufacture JULY 1 2008

Engine(s) currently installed:

Manufacturer Lycoming Model 10-360-A1A Serial L-3004-36
Manufacturer _____ Model _____ Serial _____

Propeller(s) currently installed:

Manufacturer HARTZELL Model _____
HUB Model _____ Serial _____ Serial _____
Blade Model _____ Serial _____ Serial _____ Serial _____
Blade Model _____ Serial _____ Serial _____ Serial _____

YEAR: 08	RECORDING TACH TIME	TODAY'S 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.)
DATE	ENG		Airframe	
7/18	511.	.6	511.6 / .6	1 st Lt ALT #2 NOT FUNCTIONING. HEAVY LEFT wing Adj flap. RELEASED for TEST [REDACTED]
7/19	511.6	1.2	512.8 / .2	Lt wing still Heavy. Further Adj, Lt flaps
7/19	TOTAL TIME Airframe 1.8	1.2	1.8	Chg springs Aileron Trim Rudder Biased To Left (maybe tongue) AND rec bs Adj
7/26	512.2	1.0	513.2	Heat Blisters on cowling Hi OIL Press (98)
8-4	513.2	1.0	514.2	Hi OIL Press fixed (68 PSI) OIL temp on same Ground also fixed 1/2 hr Auto Pilot
8-7	514.2	.5	514.7	OIL temp Reads 228° & Climbing

YEAR: 08	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations
DATE			514.7	Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
8/9	514.7	1.2	515.9	MADE AINS COOP OVER OKC 186°/73° IN FLIGHT
8/10	515.9	1.1	517	LEAK IN OVERFLOW MAIN (HEADER) TANK OIL TEMP
8/13	517	1.2	518.2	RISES 15/4000 DOWN
8/13	518.2	0	518.2	ARRIVE 1 NOSIG SER 1 NOSIG EGT# 4 NOSIG CHT# 1 NOSIG
8/17	518.2	1.0	519.2	OK FUELING
8/22	519.2	1.5	519.7	EGT# 4 NOSIG CHT# 1 NOSIG CHG PROBES NO HELP
8/25	519.7	1.0	520.7	EGT. CHT. FIXED
8/28	520.7	1.1	521.8	GEAR (NOSE) REPAIRED
8/28	521.8	.8	522.6	NEW GPS ANT ORDERED
8/30	522.6	1.1	523.7	PATRON WORK
9/1	523.7	1.0	524.7	VERY ROUGH, LANDING WIND 16/226, GOOD LANDING
9/2	524.7	1.4	526.1	KEON - KEON KEON

511.

YEAR: 08	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations
DATE	526.1			Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
9/3	526.1	1.6	527.7	GPS to Autopilot connection made TERRAIN uploaded
9/4	527.7	1.3	529.0	Channel 1 & 2 SERIAL data not working
9/7	529	1.0	530.0	
9/8	530	1.0	531.0	
9/9	531	.7	531.7	
9/11	531.7	1.0	532.7	X C KAS h
9/11	532.7	1.3	534.0	3 ILS Added Power for TP (Better)
9/16	534.0	.8	534.8	Chg oil & filter AT 534.0
9/16	534.8	1.1	535.9	
9/17	535.9	1.8	537.7	Auto pilot & AVIONICS EXERCISES
9/18	537.7	1.1	538.8	ILS Practice
9/19	538.8	1.0	539.8	ILS Practice

				Description of Inspections, Tests, Repairs and Alterations
YEAR: 08	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
DATE	539.8			
9/20	539.8	1.6	541.4	Slow flight Approach to stalls
9/21	541.4	1.3	542.7	Confirming Airinc 429 Mod 1 NOP TOTAL TIME AIRFRAME 31.7
9/22	542.7	.7	543.4	Tried ILS ON A/P (UNSUCCESSFUL)
9/23	543.4	2.1	545.5	VARIOUS APPROACHES Burn 8.4/hr
9/24	545.5	1.0	546.5	LOCAL AREA Bored holes
9/25	546.5	1.3	547.8	LOCAL Best flight so far Very nice
9/28	547.8	1.0	548.8	Local Check Pos'n of Flap rigging
9/30	548.8	1.3	550.1	Sinnuy got TRIM Tuned?
10/3	550.1	1.0	551.1	I certify That The Prescribed flight stalls Test hours have been completed and the Aircraft is Controllable Throughout its normal range of design features and is safe for operation.

[illegible]

YEAR:	RECORDING TACH TIME	TODAY'S 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 Personnel (Check boxes for other specific entries)
N#: 510G Model: Lancair Serial# 660-320-404 Date: 08/19/2020 TACH: 1143.3 TSMOH: 516.6 - Completed annual condition inspection in accordance with FAR Part 43 Appendix D - Replaced aircraft main fuel filters with new P/N FF3419DL. - Cleaned, inspected, and greased wheel bearings - Inspected ELT IAW FAR 91.207 (d) ELT Operational Check, ops check normal. Replaced batteries with new Duracell "D". ELT Batteries Expire 8/19/2022 - Replaced right aileron hinge pin to remove excessive play - Replaced alternate air control cable with new P/N A-700. Rigged for correct operation. - Repaired tail nav light wiring to work with led. - Removed defective Concorde battery RG35AXC and installed new Odyssey Battery P/N PC-545MJ. Fabricated new support structure for battery. - Performed New aircraft weight and balance. New empty weight 1204 LBS and Empty C.G. 75.77 All work was performed in accordance with manufacturer's specifications and with current Federal Aviation Regulations Signed <u>Chris Merani, AP</u> Chris Merani, AP <u> </u> A END				

YEAR: 2020	RECORDING TACH TIME	TODAY'S 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.)
DATE 9/23	1169		542.3	OIL CHANGE



N510G Lancair 360 s/n 660-320-404FB Tach: 1244.8 W/O# MRL-042821

The following maintenance and inspection(s) were accomplished using the owner's Lancair 320-360 Build Manual Chapters 5, 13 and 14, as applicable.

- Removed and replaced landing gear hydraulic hard lines and hoses with new 6061 tubing, MIL-H-303-4 hose and 491-4-45 fittings, AN815-4D, AN818-4D and AN819-4D sleeves. Hydraulic reservoir serviced with MIL-H-5606 hydraulic fluid; Retraction, extension, emergency extension, operational and leak checks found to be satisfactory.

Technician(s): L. Dove, N. Pogue, A. Staub

I certify this aircraft has been repaired, inspected and found to be in a condition for safe operation with regard to the work performed. A written, dated and signed list of discrepancies and un-airworthy items was provided to the owner.

Signed:

Steven A. Wilbur AP

IA

Date:

4/28/2021

Performance One Aviation, Inc.

Mesa AZ 85215

Repair

YEAR:	RECORDING TACH TIME	TODAY'S 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.)
DATE				

N#: 510G Model: Lancer 360 Serial#: 6632404 Date: 2/21/2022 Tach: 1271.4



Completed annual condition inspection in accordance with FAR Part 43 Appendix D. Inspected ELT IAW FAR 91.207 (d) ELT operational check, ops check normal. ELT Batteries Expire 8/19/2022. Sent out nose gear strut for rebuild of seals, then reinstalled. Repaired cowling air scoop as required, and repainted.

I certify this Airframe has been inspected or repaired IAW applicable title 14 code of federal regulations and manufacture's specifications and is approved for return to service as it relates to the work performed.

Signed

Chris Merani, AP [redacted] A

YEAR:	RECORDING	TODAY'S	TOTAL	Description of Inspections, Tests, Repairs and Alterations
TAILWIND AVIATION LLC EST. 2021				
Aircraft Make & Model: Lancair 360 Date: 9/11/23				Serial Number: 660-320-440 Total Time: <u>1390.3</u> Hrs Registration: N510G Tach Time: <u>1390.3</u> Hrs
Removed instrument panel cover. Removed, cleaned and reinstalled GPS antenna BNC antenna connectors from Garmin 430 and the antenna. Reinstalled instrument panel cover. Ops checked GPS satellite acquisition – Good.				
_____, A&P Cert #: _____ <i>Terry L. Sickler</i>				
TAILWIND AVIATION LLC EST. 2021				
Aircraft Make & Model: Lancair 360 Date: 9/12/23				Serial Number: 660-320-440 Total Time: <u>1390.3</u> Hrs Registration: N510G Tach Time: <u>1390.3</u> Hrs
Removed instrument panel cover. Removed, cleaned and reinstalled GPS antenna BNC antenna connectors from Garmin 430 and the antenna. Reinstalled instrument panel cover. Ops checked GPS satellite acquisition – Good.				
_____, A&P Cert #: _____ <i>Terry L. Sickler</i>				

TAILWIND

AVIATION LLC
EST. 2021

Repair

VI

D

Aircraft Make & Model: Lancair 360
Date: 10/17/23

Serial Number: 660-320-440
Total Time: 1407.9 Hrs

Registration: N510G
Tach Time: 1407.9 Hrs

Installed smoke system IAW Smoke System Helper Universal Kit Installation Manual. The tank and pump were mounted onto left aft baggage compartment floor. The smoke system was plumbed into injectors mounted into the cross-over exhaust system and wired into the electrical system. All components were inspected and tested for security and the pump was ops checked - Good. The Aircraft Equipment List, Empty Weight & Balance Documentation and Flight Weight & Balance Documentation were updated. Replaced center attachment bolt on right metallic baffle. Installed a cover on the cabin air box inboard port. Re-connected a separated spade connector on the Avionics Master Switch input power wire. [REDACTED], A&P Cert # [REDACTED]

Terry L. Sickler

OG
4 Hrs

LOG
Hrs

YEAR:	TAILWIND AVIATION LLC EST. 2021			YEAR
DATE	Aircraft Make & Model: Lancair 360	Serial Number: 660-320-440	Registration: N510G	DATE
	Date: 10/19/23	Total Time: 1407.9 Hrs	Tach Time: 1407.9 Hrs	
	Troubleshoot and repaired inoperative right fuel transfer pump by removing, inspecting and reseating right hand connector on the Fuel Pump Controller. Performed operational test of Fuel Transfer Pump System – Good.			
	[REDACTED], A&P Cert #: [REDACTED]			
	Terry L. Sickler			
	TAILWIND AVIATION LLC EST. 2021			
	Aircraft Make & Model: Lancair 360	Serial Number: 660-320-440	Registration: N510G	
	Date: 10/27/23	Total Time: 1410.9 Hrs	Tach Time: 1410.9 Hrs	
	Removed Garmin 430, internal battery pack replaced at Sarasota Avionics, and unit re-Installed. Ops Test-Good.			
	Removed Fuel Pump Controller and repaired loose wire in right hand pump connector. Ops Test-Good. Performed			
	Ops Test and leak check of Smoke System-Good. [REDACTED], A&P Cert #: [REDACTED]			
	Terry L. Sickler			

YEAR 	TAILWIND AVIATION LLC EST. 2021		
DATE 	Aircraft Make & Model: Lancair 360 Date: 12/14/23	Serial Number: 660-320-440 Total Time: 1414.3 Hrs	Registration: N510G Tach Time: 1414.3 Hrs

Performed aircraft Condition Inspection in accordance with FAR part 43, Appdx D and Lancair Checklist, dated 11/7/23. See checklist for detail and notes. ELT batteries replaced, next due 12/2035. ELT was inspected, battery cavity cleaned and tested IAW FAR 91.207d and ACK ELT-10 Owner's Manual – Ops check good. Cleaned and lubricated aircraft IAW Lancair checklist. Removed, cleaned and re-charged K&N air filter IAW K&N process sheet. Complied with inspections recommended by Lancair Service Bulletins 010-92, 014-93, 050-0999 and 054-0600. These actions are documented in the Airworthiness Directive and Service Bulletin Compliance Reports located in the maintenance records. Replaced 2 right side cowling Camlocs with screws/nut plates where contacting cooling baffling and rocker box cover. Installed a new 2753-7 Camloc in cowling windscreen row. Removed Matco wheels and brakes from main gear and installed new Grove wheels/brakes IAW Grove Instructions for Continued Airworthiness, 13046-11, Rev G. Installed two new Aero Classic 400-5 tires and tubes. Aircraft weight & balance report updated. Axle shims were installed on each side to correct positive camber by 2 degrees. Pressure bled brake system with 5606 hydraulic fluid and serviced reservoir. Performed initial Ops check of brakes – Good. Replaced seat belt/harnesses with new Crow 4-point harnesses. Installed bungee straps on aft bookrack. I certify this aircraft has been inspected IAW the scope and detail of FAR Part 43, Appendix D and is determined to be in a condition for safe operation.

_____ A&P# _____
 Terry L. Sickler

TAILWIND AVIATION LLC EST. 2021			
<u>YEA</u>	<u>Aircraft Make & Model: Lancair 360</u>	<u>Serial Number: 660-320-440</u>	<u>Registration: N510G</u>
<u>DAY</u>	<u>Date: 1/8/24</u>	<u>Total Time: 1414.3 Hrs</u>	<u>Tach Time: 1414.3 Hrs</u>
Re-Rigged flaps to be faired equally at wing trailing edge by adjusting left flap pushrod at the drive motor bracket. Ops checked- Good. [REDACTED] A&P# [REDACTED] Terry L. Sickler			
TAILWIND AVIATION LLC EST. 2021			
	<u>Aircraft Make & Model: Lancair 360</u>	<u>Serial Number: 660-320-440</u>	<u>Registration: N510G</u>
	<u>Date: 2/25/24</u>	<u>Total Time: 1417.9 Hrs</u>	<u>Tach Time: 1417.9 Hrs</u>
Replaced aileron trim springs with new stainless-steel springs, one spring size larger and the same length (2 inches). Tested aileron trim actuator to left and right limits – Good. Re-set left flap to plus 4 degrees. Installed gap seals on upper surfaces of both ailerons, both elevators and elevator trim tab. Installed gap seals on both upper and lower surfaces of both flaps. Performed control travel and freedom of movement tests – Good. [REDACTED] A&P# [REDACTED] Terry L. Sickler			

YEAR:	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations
2024				Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)

TAILWIND

AVIATION LLC
EST. 2021

Aircraft Make & Model: Lancair 360 Serial Number: 660-320-440 Registration: N510G
Date: 4/11/24 Total Time: 1422.7 Hrs Tach Time: 1422.7 Hrs

Installed NACA Scoop and Vent Louver in left lower cowling using fiberglass, catalyzed epoxy, flox and micro. Installed 3" SCEET duct on NACA Scoop. Wrapped lower exhaust manifold with heat tape and clamped in place. Removed and replaced 6 defective CamLocs on upper cowl. Replaced 1 CamLoc Retainer on left aft firewall flange.

_____, A&P#:

Terry L. Sickler

TAILWIND

AVIATION LLC
EST. 2021

Aircraft Make & Model: Lancair 360 Serial Number: 660-320-440 Registration: N510G
Date: 6/11/24 Total Time: 1432.9 Hrs Tach Time: 1432.9 Hrs

Removed Avionics power switch and replaced with Pitot Heat power switch. Installed new Pitot Heat power switch.

Ops Test - Good. _____, A&P Cert #:

Terry L. Sickler

YEAR: 2024
DATE

Serial Number: 660-320-440

Registration: N510G
Tach Time: 1446.5 Hrs

Total Time: 1446.5 Hrs

Date: 6/28/24
 Total Time: 14.40
 Inspected avionics power wire replacement. Ops check-Good. Removed oil cooler and scoop from left forward air inlet. Fabricated custom fiberglass oil cooler duct adapter. Fabricated two 45-degree oil cooler mounting brackets. Integrated adapter, mounting brackets and spacers/through bolts with cooler. Re-routed fuel hose, ignition wires and smoke oil lines to make space for oil cooler. Installed oil cooler assembly on lower left firewall and re-routed existing oil lines. Fabricated oil cooler inlet cover plate and installed on floor of left air inlet. Installed 3" SCEET duct between NACA inlet and oil cooler. Leak check-Good. Empty weight & balance calculation completed and placed in aircraft maintenance records. Replaced 2 CamLoc receptacles along rear upper cowl interface and 4 CamLocs in upper cowl. Replaced missing gap tape on left flap and right aileron.

[Redacted Signature] A&P Cert # [Redacted]

Terry L. Sickler

~~Terry L. Sickler~~

YEAR:	TAILWIND AVIATION LLC EST. 2021			YEAR:	REC TAC TIM
DATE	Aircraft Make & Model: Lancair 360	Serial Number: 660-320-440	Registration: N510G	DATE	
2024	Date: 7/8/24	Total Time: 1446.5 Hrs	Tach Time: 1446.5 Hrs		
	Removed left inboard main gear door and hinge. Fabricated and integrated replacement lower hinge element. Re- installed left inboard gear door. Alignment Check-Good. [REDACTED] A&P Cert #: [REDACTED] Terry L. Sickler				
YEAR:	TAILWIND AVIATION LLC EST. 2021			YEAR:	REC TAC TIM
DATE	Aircraft Make & Model: Lancair 360	Serial Number: 660-320-440	Registration: N510G	DATE	
	Date: 7/17/24	Total Time/ Tach Time: 1446.5 Hrs			
	Installed 2 each, 5V USB ports, with voltage transformer and in-line fuse holder, in center console, just forward of arm rest – Ops check good. Replaced both main tires with identical replacement tire, Aero Classic, 11x4.00-5 8PR. Inspected and reused existing serviceable tube. Cleaned and inspected brakes and wheel. Re-torqued wheel bolts and disk tie bolts to 90 in-lbs and set axle nut IAW Grove Installation Instructions for Wheels. Installed a ¼ degree axle “Toe-In” shim on each main gear axle. Replaced AN4 attachment hardware as needed for increased dimensions. Re- torqued axle bolts to 99 in-lbs. Replaced pitot system test stub tubing with new 3/8” poly tubing – Ops check good. --- [REDACTED] A&P#: [REDACTED] Terry L. Sickler				



Engine Record General Information

Manufacturer Lycoming Model 10-360-A1A

Serial _____ Type Certificate _____

This engine is currently installed in aircraft LANCAIR 360 # N510G

Minimum Octane Fuel 100LL Oil Grade: Summer 50/100 Winter 40/80

Magneto Time _____ Point Setting _____ Firing Order _____

Spark Plug Gap _____

Manufacturer recommended overhaul at 2400 hours

Notes

ENG Purchased from WENTWORTH AERO
DEC 06. SANTA ROSA CALIF O'HAUL IN
1996 CURRENTLY HAS 518 hrs NO LOGS AVAILABLE

YEAR: DATE	RECORDING TACH TIME	TODAY'S 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.)
				Cylinder with new ECI Titan Steel
				Cylinder Assembly S/N 42616-24
				Installed all new gaskets and seals,
				Disassemble and inspected magnetos,
				Tested coils, condensers, Reset internal
				Timing, Lubricate gears and inspected
				impulse coupling. Installed on eng.
				and timed per data plate, Magneto
				SERIAL No's 419101 and 403079
				Leeland Aero Service
				03/07/07 [REDACTED]
				Nashua NH 03063



Engine Record General Information

Manufacturer Lycoming Model IO-360-A1A
Serial L-3004-36 Type Certificate N510G

This engine is currently installed in aircraft: Lancair 360

Minimum Octane Fuel _____ Oil Grade Summer _____ Winter _____
Magnetto Time _____ Point Setting _____ Firing Order _____
Spark Plug Gap _____
Manufacturer's Recommended Overhaul at _____ hours

YEAR:	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.)
DATE				
JUNE 29, 2015				Total Time 626.7
				Tac Time 626.7
				This Engine Overhauled in accordance with Lycoming overhaul Manual and instructions & Service Letters & Bull. It is complied with. The following Parts completed by Rick Romans: Main Crank journals ground M.006, Rod Journals Ground to M.003. 8 Tappet Bodies recondition. 4 Conn Rods new bushings & Rod & Caps Re worked. All Steel Parts Magnaflexed, all others dy checked All releases in rear of log. All New rod bearings replaced with new & Main bearings with New. Case halves repaired by Divco, New Dowel Pins all New Hyd Socket tappets, all new Gaskets & Seals, Lock Taps, New vernatherm, New piston Pin Plugs. Next Page

YEAR:	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.)
DATE	continue of Major Overhaul entry:			All new Exhaust Valves & Intake valves, New Springs, inner & outer. All 4 new Exhaust valve caps. All New Guides, New Ring Sets, ground seats & lapped all Valves, new valve keepers, all New Rod Bolts & Nuts, new hoses. Serviced oil system with AeroShell 40wt. Non-detergent oil. Preoiled Engine & Run & checks good.
				IA [REDACTED]
				This Engine got New Lycoming camshaft, No. [REDACTED], Prop Governor Overhauled, Prop was checked, Invoice # [REDACTED] of Reseal at Precision Propeller, [REDACTED]
				The Camshaft was Lycoming New Parts, P/N [REDACTED]

YEAR	DESCRIPTION	TODAYS	TOTAL	Description of Inspections, Tests, Repairs and Alterations
Registration:	N510G	SKY'S THE LIMIT LLC	Date:	11/24/2015
AC Manf:	Lancair	AVIATION SERVICES	SMOH:	
AC Model:	360		Tach:	692.5
AC Serial No:	660-320-404	PEYTON, CO 80831	Hobbs:	
Maintenance Record: Powerplant				
R&R Engine to oil cooler hoses with new part numbers 124F001-8CR0425 and 124F001-8CR0451 hoses fabricated by Precision Hose Technology Inc. Replaced #2 and #4 cylinder valve cover gaskets. Replaced front engine crankshaft seal and propeller seal. Reinstalled propeller and torqued bolts to 70 Ft-lbs. Safetied oil filter and oil drain plug. Performed engine run, no leaks evident.				
John M Hershey A&PIA [REDACTED]				

2016				
6 May	780.0	94.8		Oil change / new filter cut filter [REDACTED]

YEAR:	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.)
DATE			TSMOH	
7-1-19	880.5		253.8	Removed Bendix S4LN-20 Mags and installed E-Mag electronic ignition system Model P114 IAW install guide LC114.28. Installed Mag power switches on top left panel, and P-lead switches also. Timed and ops check normal. <i>Chris Merani</i>

N#: 510G
 Model: Lancair Engine: IO-360-A1A S/N L-3004-36
 Serial# 660-320-404
 Date: 08/19/2020
 TACH: 1143.3 TSMOH: 516.6

- Completed annual inspection in accordance with FAR Part 43 Appendix D
- Engine Compressions 1- 72/80 2- 75/80 3- 74/80 4-70/80
- Removed Oil Filter, cut and inspected, no metal found. Installed new Filter P/N AA48103-2, and added 7 qts Phillips XC 20W50
- Repaired alternate air linkages with new bushings and hardware.
- Repaired mixture linkage with new bushings and hardware. Verified Correct rigging.
- Verified correct timing, replaced all spark plugs with new P/N BR8ES
- Performed engine ground run and leak check with satisfactory results.

All work was performed in accordance with manufactures specifications and with current Federal Aviation Regulations.

Signed *Chris Merani, A*
 Chris Merani, A

END

YEAR:	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.)
DATE				

TAILWIND AVIATION LLC EST. 2021

Engine Make & Model: Lycoming O-360-A1A SN: L-3004-36 Installed Aircraft: Lancair 360, N510G
 Date: 12/14/23 Engine Total Time: 1925.3 Hrs Engine Time Since Major Overhaul: 787.6 Hrs

Tach: 1414.3

Performed engine Condition Inspection in accordance with FAR part 43, Appdx D and Lancair Checklist, dated 11/7/23. See checklist for detail and notes. Removed, cleaned, tested and rotated spark plugs IAW Lancair checklist. Engine oil changed with 6.5 quarts of Aeroshell 15-50W. Oil filter replaced with Tempest AA-48103-2 filter. Oil filter cut and inspected for contaminants – None found. Oil sample taken and submitted for analysis. Tightened and re-safetied oil filler tube. Complied with inspection IAW Airworthiness Directive 2015-19-07. This action is documented in the Airworthiness Directive Compliance Reports located in the maintenance records. Engine performance run was accomplished with nominal performance. Warm cylinder compression test (over 80) performed – Cyl 1: 76, Cyl 2: 77, Cyl 3: 77, Cyl 4: 76. Inspected engine bay for leaks – None found. I certify this engine has been inspected IAW the scope and detail of FAR-Part 43, Appendix D and is determined to be in a condition for safe operation.

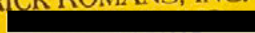
_____, A&P #: _____
 Terry L. Sickler

SERVICEABLE

Mfr. Name Lycoming
 Component Name Crankshaft
 Model O-360
 Serial R49496-1

The aircraft component 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 work performed are on file at this facility under the Job Number shown below.

Work Order No. 49496
 Date 4/28/15
 Signed 

RICK ROMANS, INC.

 TULSA, OK 74115
 FAA REPAIR STATION NO. 

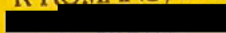
VICEABLE

Lycoming
 Name Four cylinder
74502

component identified above and inspected in accordance Regulations of the Federal Administration and is approved service.
 Details of the work performed are on file under the Job Number

No. 49656
5-26-15



K ROMANS, INC.

 TULSA, OK 74115
 AIR STATION NO. 

VICEABLE

Lycoming
 Name Two cylinder
74636

component identified above and inspected in accordance Regulations of the Federal Administration and is approved service.
 Details of the work performed are on file under the Job Number

49656
5-26-15



ROMANS, INC.

 TULSA, OK 74115
 STATION NO. 

ABLE

Lycoming
 Name Two cylinder
74636

component identified above and inspected in accordance Regulations of the Federal Administration and is approved service.
 Details of the work performed are on file under the Job Number

49656
5-26-15



ROMANS, INC.

 TULSA, OK 74115
 STATION NO. 



Propeller Record General Information

Propeller Manufacturer Hartzell

Model IBF

Type 2 BLADE 72"

Hub Series # HC-FZYR-EXP

Blade # F7666A-4

Date of Manufacture _____

Aircraft Installed On: LANCAIR 360

Make/Model

Serial #

660-320-404 FB

☐ HUB & BLADE INSPECTIONS, REPAIRS AND ALTERATIONS

Year: 06	Total Time in Service	Description
Date: 9/5	UNK	Overhaul of hub and blades
Next Inspection Due:	Time Since Overhaul	Blades cut to 72"
	-0-	Certified EXPERIMENTAL
		Mech. Cert. # or Repair Station # GGEISZ # [REDACTED]
Year: 09	Total Time in Service	Description
Date: 5/28	52.8	1 ST ANNUAL INSPECTION. INSPECTED
Next Inspection Due: 5/10	Time Since Overhaul	Blades & Hub. All found OK. Greased
	52.8	hub to clean runout grease. All OK
		Mech. Cert. # or Repair Station # GGEISZ # [REDACTED]
Year:	Total Time in Service	Description
Date:		HARTZELL 2 blade 72"
Next Inspection Due:	Time Since Overhaul	HCF2 YR - 1 BF EXP
		BLADE F7666A-4
		Mech. Cert. # or Repair Station # SN-660-320-404 FB

HUB & BLADE INSPECTIONS, REPAIRS AND ALTERATIONS ☐	
TAILWIND AVIATION LLC EST. 2021	
Year:	
Date:	
Next Due:	
Propeller Make & Model: <u>Hartzell HC-F2YR-1BF EXP</u> Blades: <u>F7666A-4</u> Installed Aircraft: <u>Lancair 360, N510G</u> Date: <u>12/14/23</u> Prop Total Time: <u>1414.3 Hrs</u> Prop Time Since Major Overhaul: <u>787.6 Hrs</u>	
Year:	
Date:	
Next Due:	
Performed propeller Condition Inspection in accordance with FAR part 43, Appdx D and Lancair Checklist, dated 11/7/23. See checklist for detail and notes. Serviced prop with Aeroshell 6 lubricant IAW Hartzell Owner's Manual, 115N-000-A. Small nick blended on prop blade #1, station 27, leading edge. These actions are documented in the Airworthiness Directive Compliance Reports located in the maintenance records. Prop functional test completed - Nominal. Added 8 layers of chaffing tape to forward hub to spinner bulkhead interface to stabilize spinner. I certify this propeller has been inspected IAW the scope and detail of FAR Part 43, Appendix D and is determined to be in a condition for safe operation. [REDACTED] , A&P #: [REDACTED] Terry L. Sickler	
Year:	
Date:	
Next Inspection Due:	Time Since Overhaul
Mech. Cert. # or Repair Station # _____	

☐ HUB & BL

TAILWIND
AVIATION LLC
EST. 2021

Year: 2024

Date: _____ Propeller Make & Model: Hartzell HC-F2YR-1BF EXP Blades: F7666A-4 Installed Aircraft: Lancair 360, N510G

Date: 6/28/24 Prop Total Time: 1446.5 Hrs Prop Time Since Major Overhaul: 819.8 Hrs

Next Inspection Due: _____

Two small nicks blended on prop blade #2, stations 29 and 31, leading edge. Both prop blades touched up along leading-edges for slight erosion. _____, A&P #: _____

Larry L. Sickler

Year: _____	Total Time in Service	Description
Date: _____		
Next Inspection Due: _____	Time Since Overhaul	
		Mech. Cert. # or Repair Station # _____

Year: _____	Total Time in Service	Description
Date: _____		
Next Inspection Due: _____	Time Since Overhaul	
		Mech. Cert. # or Repair Station # _____

Version 11/27/23

360
Lancair Legacy

NS10C
SN: 660-320-440

Annual Condition Inspection Checklist

1414.3 TT = Tach

Performed by: T. Siskler
AVP [Redacted]

Completion Date: 12/12/23

Complete	Maintenance/Inspection Item	Comments
	Pre-Inspection	
✓	Research AD and Service bulletins	Research ADs + SB - CW
✓	Inspect entire airframe for evidence of de-lamination or damage	Minor damage on lower fuselage Paint missing 1.5" Spot L-Flap
✓	Clean out glove box	
✓	Remove all items from baggage compartments	
✓	Remove the cowling	
✓	Remove inspection panels	
✓	Remove rear bulkhead	
✓	Remove spinner	
✓	Remove seat cushions & seat pans	
	Wing Group	
✓	Check landing, position & strobe lights	
✓	Inspect aileron hinges & lube with Tri-flow	
✓	Inspect aileron control rods and bell crank	Slight Play in Bellcrank = Slight Motion reported by pilot
✓	Inspect wing attachment bolts	
✓	Inspect quick drains	
✓	Verify operation of fuel tank vents	
✓	Inspect fuel cap seal for wear	Fuel Tank Qty Placard Missing
✓	Inspect aileron trim for full motion	
NA	Inspect speed brakes (use a Bend-a-Light to look inside the trunk)	
✓	Aileron Travel - ① Forward at 11° - Both ✓	R - Up 21° - Dn - 14° L - Up 22° - Dn - 15°

360
Lancair Legacy

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Condition Inspection

✓ Fuselage - Area behind exhaust pipes is heat damaged

MA Info

11/12/23

✓ Inspect Remaining SB's

NA	Verify speed brakes retract with loss of electrical power	
NA	Check & drain AOA ports (stick a wire in the port openings to verify clear)	
✓	Inspect pitot tube	
✓	Verify pitot heat is operational	
✓	Wing Attach Point	- Needs re-taped R side
Flap Group		
✓	Inspect flap motor & wiring	
✓	Inspect flap torque tube	
NA	Inspect flap position switch	
✓	Inspect flap hinges + lube	
✓	Verify full operation of flaps	Rt - 45° > Flaps open ~ 40° Lt - 50° > Imbalanced
✓	Inspect actuator tubes	
Tail Group		
✓	Inspect rudder hinges & lube with Triflow	
✓	Inspect elevator hinges & lube with Triflow	
✓	Inspect rudder pushrod	
✓	Inspect elevator pushrod	
✓	Inspect elevator trim for full movement	
✓	Inspect rudder trim for full movement	
✓	Inspect rudder bell crank	
✓	Check elevator stops	
Landing Gear Group		
✓	Inspect nose gear strut for leakage and proper inflation - 2.75"	
✓	Inspect main gear struts for leakage and proper inflation	L - 1.2" R - 1.35"

Lancaster Legacy 360 Page 2 of 8 Condition Inspection

NA	Inspect brake pads for wear	Refer to Grease
NA	Inspect tires for wear, cuts, flat spots & proper inflation pressure	System Installation
✓	Inspect landing gear doors	Not Done - 1 screw missing
NA	Inspect and repack wheel bearings every two years	Not Done - 1 screw missing
✓	Check brake fluid level	Air in master line Reservoir is low. ✓
✓	Inspect brake lines for abrasion or damage	
✓	Perform gear retraction	
✓	Perform emergency extension test	
✓	Swing gear freely and check for free and proper movement	
✓	Inspect wheel well hydraulic lines	
✓	Inspect down position micro-switches	
NA	Verify proper operation of airspeed pressure switch (squat switch)	
NA	Verify shimmy damper operation using "Lazy Susan" bearing	Not Installed
NA	Verify nose gear centering mechanism	
Engine Group		
✓	Inspect oil dip stick access door for proper operation	Oil Filter Tube is loose. - ✓ Tightened
✓	Inspect cowling for wear or damage	Lux Coat Damage from fuel control cable ✓ Upper Cowling Missing 7 Channels + Corrosion Needs Chalking Tape - Completed ✓
✓	Remove spinner and inspect propeller hub	RT & LT
✓	Inspect propeller for nicks & dress as required	Dressed 1 small nick Can Re-spray if Needed ✓
✓	Grease propeller as required by Hartzell (Aeroshell 6 grease 1 fl-oz or 6 pumps of the grease gun). Reinstall lube fittings to 50 in-lb torque (seems high)	
✓	Checked engine for oil leaks	Oil Filter Change AA48103-2 Phillips XC 20W-50 6.5qt
✓	Remove spark plugs (Keep track of the location)	

NA Info

Hold for Aeroshell 6

Change Lux Coat from fuel control cable to Chalking Tape

Hold for Lux Coat

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Condition Inspection

Lancair Legacy 360

✓ Inspect Metallic Cooling Baffles - Damage at 24 Front
 ✓ Inspect Rubber Cooling Baffles - Left + Right Front Baffles Torn + Worn Throttle

✓	Clean spark plugs	
✓	Gap spark Plugs (0.016 to 0.021" for fine wire plugs) 032 (NGK)	
✓	Anneal or use new gaskets (heat gasket until glowing red then quench in cold water)	
✓	Rotate Spark Plugs (1T to 4B, 1B to 4T, 2T to 3B, 2B to 3T, 3A to 3B, 3B to 3A)	20 4th Torque
✓	Perform Compression Check note type of leakage (valve or rings) OK 50	
✓	Cylinder #1 = 76	
✓	Cylinder #2 = 77	
✓	Cylinder #3 = 77	
✓	Cylinder #4 = 76	
✓	Cylinder #5 =	
✓	Cylinder #6 =	
✓	Check engine case bolts for tightness	
✓	Inspect oil cooler for leaks and box for cracking per 88034	
NA	Check oil cooler door for proper operation	
✓	Inspect engine mount for wear or corrosion	
✓	Remove air filter and inspect throttle butterfly / Choke	
✓	Inspect throttle cable for security and full movement	
✓	Inspect air filter element for cleanliness and damage then reinstall if OK	
✓	Inspect fuel hoses and distribution lines	
✓	Remove, inspect, clean & re-install fuel injectors to 60 in-lbs.	
✓	Inspect fuel control cable for security and full movement	
✓	Inspect fuel system drain lines	Eng. Driv. Pump Drain, Choke hose At Battery
✓	Inspect crankcase breather hose	

Lancair Legacy 760
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 Condition Inspection

Max Info
 Wt & Bal

✓	Drain and Inspect gascolator screen & clean if required	Remove Hose & Inspect for Leaks Hose Clamp Loose Remove Hose & Inspect for Leaks
✓	Inspect exhaust system for cracks and security	
✓	Inspect exhaust flange gaskets for leaks	
✓	Inspect prop governor	
✓	Inspect prop control cable for security and full movement	
✓	Inspect baffling for cracks and clearance with cowl	Baffling @ R/F Prop Wires Loose Cowl Cowls contacting #1 Cylinders Cause Wt & Bad Wire needs to be up
✓	Check EGT and CHT leads	
✓	Inspect engine wiring for security and abrasion	
✓	Inspect spark plug leads	
✓	Inspect P-leads	
✓	Check & adjust magneto timing	
✓	Install spark plugs & torque to 28 ft-lb	20 A/B
✓	Check alternator wiring	
✓	Check regulator wiring	
✓	Check engine starter for security	
✓	Check oil pressure sender, hose & wire	
✓	Check oil temp sender & wire	
✓	Check fuel pressure sender wire	
✓	Check fuel flow sender wire	
✓	Remove cabin heat muff and inspect exhaust for cracks	
✓	Inspect cabin heat SCAT	Holds In Fuel SCAT Above Air Inlet
✓	Reinstall spinner, at proper indexing	
Cabin Group		
✓	Check seat belts for security	Removed - Reinstalled New Harness
✓	Vacuum cabin	

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Nx Info

Wt & Bad

Lancair legacy
360

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Condition Inspection

✓	Check Remove battery. Clean, service and charge it	
✓	Check cabin heat control for full movement	
✓	Inspect defrost & fresh air SCAT	
✓	Inspect hydraulic lines, cylinders & dump valve	
✓	Check canopy latch mechanism for wear and proper operation	
NA	Verify that the canopy handle torque bolt is secure using 5/32" Allen wrench	
✓	Inspect canopy seal for damage and full perimeter attachment - <i>Not Complete</i>	<i>Check for Lancair fuel canopy seal. What used?</i>
✓	Check control system for security and free movement	
✓	Verify aileron stop position	
NA	Remove and inspect emergency exit window	
✓	Inspect the hydraulic pump wiring and fittings	
✓	Inspect elevator push tubes and bell crank	
✓	Inspect fresh air vents and tubing	
✓	Inspect rudder pedals, brake cylinders, brake hoses and rudder cables	
NA	Operate the fuel selector to all positions	
✓	Inspect fuel lines inside cabin	
✓	Inspect autopilot roll servo, pushrods & electrical connections	
✓	Inspect autopilot pitch servo, pushrods & electrical connections	
✓	Reinstall Seat Pans	
	Instruments Group	
✓	Check pitot tube heat operation	
✓	Check static ports w/ 0.032 safety wire	

✓	Check ELT Battery for expiration date	Appl w/ Duracell 11/11/2008 (K8)
✓	Check ELT for proper operation using impact and panel mounted switches	
✓	Inspect pitot static system tubing	
✓	Cycle all breakers and switches to verify proper operation	
✓	Check trim selector switch for proper operation	
✓	Inspect BNC connections for damage and corrosion	
✓	Inspect antenna cables	
NA	Inspect oxygen system tubing	
✓	Inspect intercom wiring and plugs	
✓	Inspect wiring going to magnetometer	
✓	Check switch and breaker connections for tightness	
✓	Check instrument connectors	
✓	Check strobe lights & nav lights for proper operation	
Functional Check and Run-up		
✓	Reinstall battery	
✓	Install all inspection panels	
✓	Remove jack fittings	
✓	Verify the gear dump valve is closed	
✓	Start engine verify oil pressure	
✓	Turn fuel selector to off and verify engine stops due to fuel starvation	
✓	Restart engine and let it warm up	
✓	Perform 1800 rpm run-up	
✓	Right mag drop =	50
✓	Left mag drop =	60
✓	Oil temperature =	250
✓	Oil pressure =	20
✓	Fuel pressure =	2.6

Lancaster Legacy 300

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Condition Inspection

