

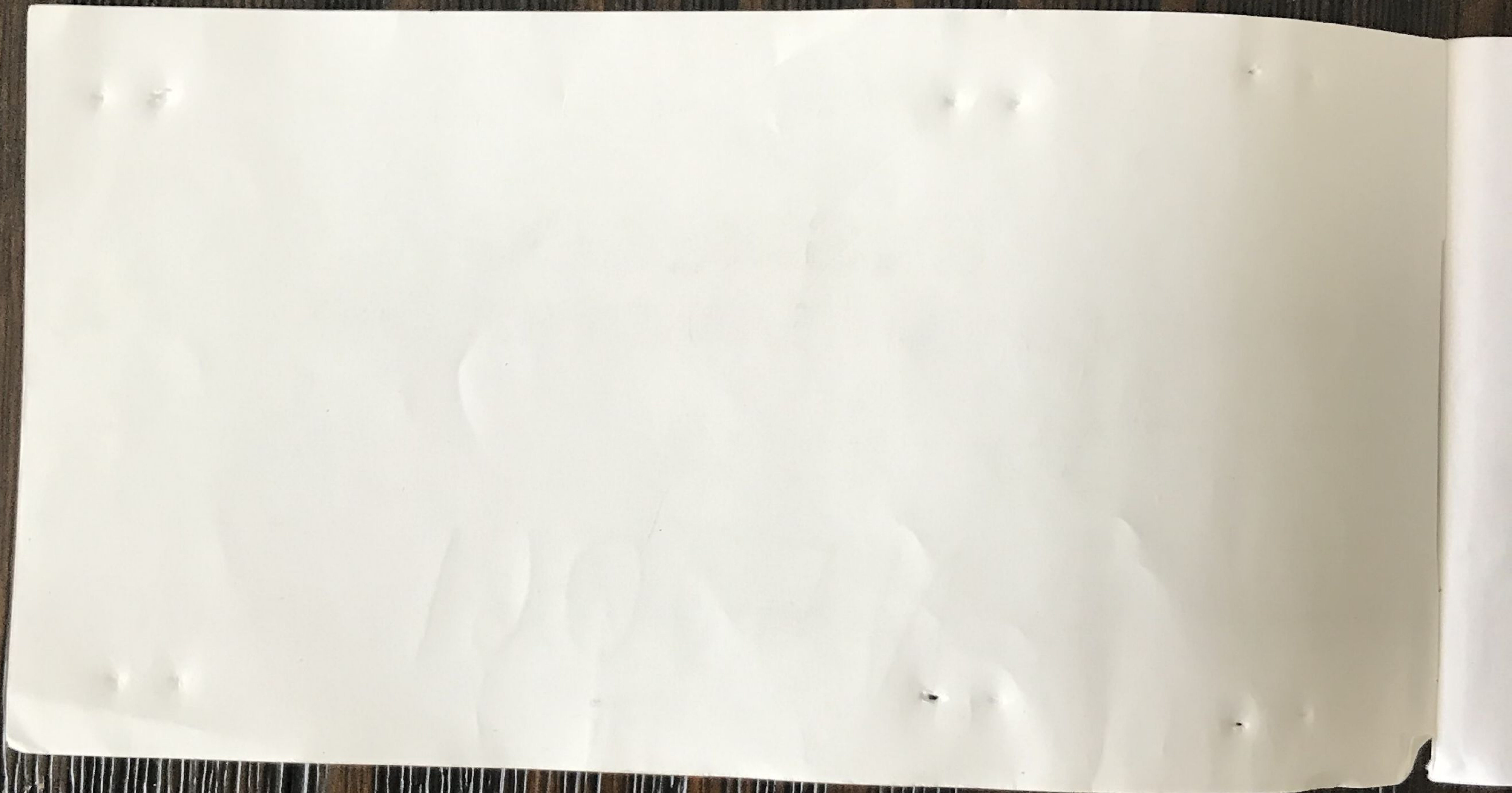
LYCOMING

A Textron Company

ENGINE LOG

N53061

SSP-1872-1



LYCOMING

A Textron Company

652 Oliver Street
Williamsport, PA 17701 U.S.A.
570/323-6181

ENGINE LOG AND MAINTENANCE RECORD

RECORD OF LYCOMING 10-390-A1A6 RL-191-80E
MAKE MODEL SERIAL

FROM March 20 10 TO _____ 20 _____
DETAILING TIME FROM 0 TO _____
HOURS HOURS

SSP-1872-1

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October 1994

SERVICEABLE PART

Manufacturer LYCOMING ENGINES
Part Name AIRCRAFT ENGINE
Model No. IO-390-A1A6
Serial No. RL - 191-80E
Remarks _____

The aircraft engine or accessory identified above was:

Rebuild

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 Lycoming Engines under order no: **AR386983**

Date 7/22/09
Signed Charles New

Signature of Authorized Person

FOR: **LYCOMING**
A Textron Company
652 Oliver Street
Williamsport, PA 17701 USA
Production Certificate #3

Form 302A (3/04-LM)

LYCOMING

A Textron Company

652 Oliver Street
Williamsport, PA 17701 U.S.A.

FINAL ENGINE ACCEPTANCE

Eng. Serial No. RL-191-80E
Inspector 59
Date 7/22/09

Form 245 (5-02)

ENGINE DESCRIPTION

Mfgr.	LYCOMING	Place	Williamsport, PA 17701	Date	March 2010
Type		Model	10-390-A1A6	Serial No.	RL-191-80E
Rated H.P.	210	Max. H.P.	210	Weight (Dry)	316 ^{Lbs} w/Accessories
Rated R.P.M.	2700	Max. R.P.M.	2700	Oil Pressure	
Bore	5.319"	Stroke	4.375"	Displacement	389 Cu. In.
Compression Ratio	8.9:1	Supercharger Ratio			
Reduction Gear Ratio	N/A				
Propeller	McCawley Propeller Systems	Hub Design		Hub Serial No.	
Blade Design	B2D34C207/78TCA-0	Blade Serial No.		Blade Serial No.	
Max. Hub H.P.		Max. Blade H.P.			
Pitch	Low 12.9° High 27.5°	Diameter	78.0" Max 76.5 _{min}	Length	
Name					
Address					

LYCOMING

A Textron Company

652 Oliver Street
Williamsport, PA. 17701 U.S.A.

Form No. 2481 (3/04-LM)

This engine has been rebuilt in accordance with the applicable Lycoming specifications. All applicable Federal Aviation Administration Airworthiness Directives and Lycoming Service Bulletins have been complied with. All parts have been inspected and have been determined airworthy to return to service. All accessories as part of the type certificate are new or newly rebuilt. Refer to enclosed Form ET001 for applicable accessory part numbers and serial numbers.

Engine Model: **IO-390-A1A6**

Serial #: **RL-191-80E**

Total Time: **0.0**

Work Order #: **AR386983**

Date Completed: 7/22/09

Authorized Signature

Charles Hess

Lycoming Engines

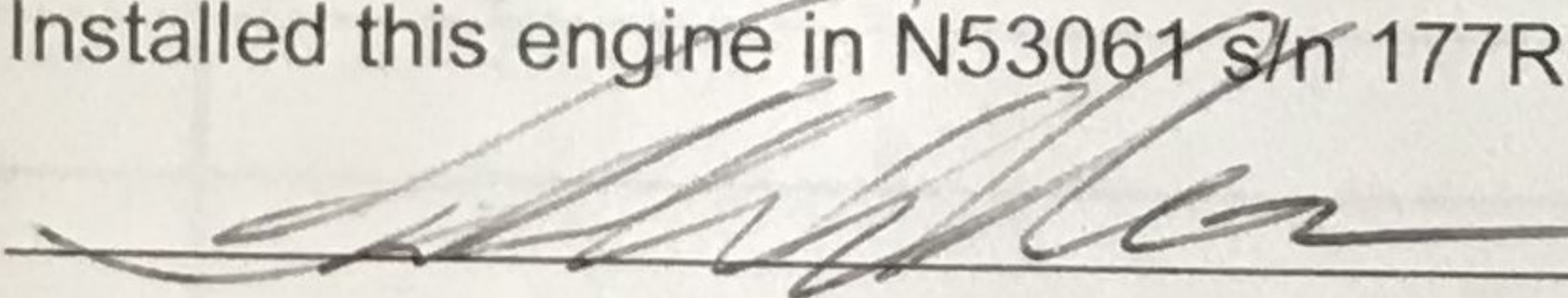
652 Oliver Street
Williamsport, PA. 17701
Production Certificate # 3

License
Number

f a

ENGINE LOG

Serial No. _____

Date	Time		REPAIRS - ADJUSTMENTS - SERVICE - REMARKS	Signature	License Number
	Hrs	Min			
			<p>Date: 5/20/2010 St. Cloud Aviation Tach: 340.7 N53061 1544 45th Ave SE <i>ACTT 1761.7</i> s/n 177RG1334 St. Cloud, MN 56304 IO-390A1A6 s/n RL-191-80E</p> <p>Installed this engine in N53061 s/n 177RG1334 per ALMO STC SA1094SC.</p> <p> Daren M Carlson IA470526948</p>		
			Page Total	All Repair Data Must Bear the Endorsement of a Certified Mechanic, and his Rating and Certificate Number MUST be Shown.	
			Brought Forward		
			Total to Date		

ENGINE LOG

Serial No. _____

Date	Time		REPAIRS - ADJUSTMENTS - SERVICE - REMARKS	Signature	License Number
	Hrs	Min			

TORNADO ALLEY TURBO INC.
300 AIRPORT RD
ADA, OK 74820

ENGINE LOG BOOK ENTRY

21 JUNE 2012

TORNADO ALLEY TURBO, INC.



N53061 CESSNA 177RG SN: 177RG1334 ACFT HOBBS: 210.5 ACFT TT: 1786.6

LYCOMING IO-390-A1A6 SN: RL-191-80E ENG TSN: 31.32

COMPLETED **ANNUAL INSPECTION** USING CESSNA MAINTENANCE MANUAL AND LYCOMING MAINTENANCE MANUAL CHECKLIST.

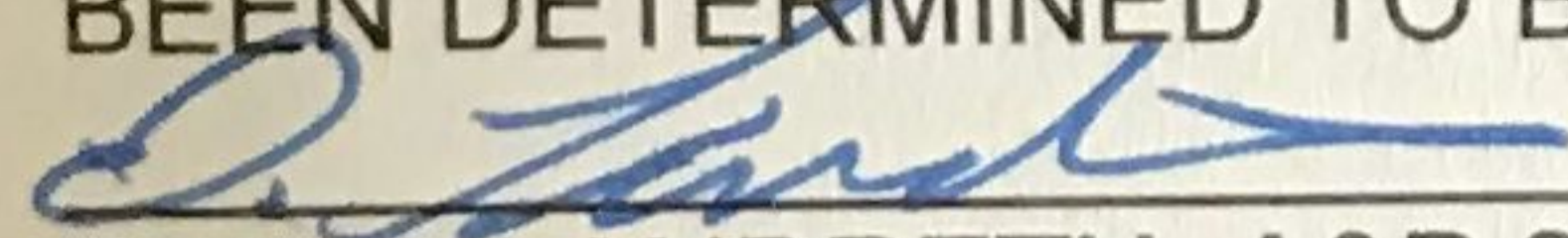
PERFORMED AIRWORTHINESS DIRECTIVE SEARCH USING **AVANTEX DISC 2012-11**.

FOUND ALL AIRWORTHINESS DIRECTIVES COMPLIED WITH OR NOT APPLICABLE.

PERFORMED CYLINDER DIFFERENTIAL COMPRESSION CHECK RESULTS WERE #1 76/80, #2 74/80, #3 74/80, AND #4 75/80.

DRAINED ENGINE OIL AND RETAINED A SAMPLE FOR ANALYSIS. REMOVED OIL FILTER AND EXAMINED ELEMENT FOR CONTAMINATES. SERVICED ENGINE WITH 8 QUARTS OF **AEROSHELL 100 AD** OIL AND INSTALLED NEW CHAMPION OIL FILTER **CH48103-1**.

I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH AN **ANNUAL INSPECTION** AND HAS BEEN DETERMINED TO BE IN AN AIRWORTHY CONDITION.



DAVID LANDRETH A&P 2651512IA

ENGINE LOG

Serial No. _____

TORNADO ALLEY TURBO INC.
300 AIRPORT RD
ADA, OK 74820

ENGINE LOG BOOK ENTRY

1 JULY 2013



N53061 CESSNA 177RG SN: 177RG1334 ACFT HOBBS: 235.5 ACFT TT: 1793.6
LYCOMING IO-390-A1A6 SN: RL-191-80E ENG TSN: 40.71

INSTALLATION OF **STC SE4081NM** TURBONORMALIZING SYSTEM IN ACCORDANCE WITH ENGINE TECHNOLOGIES INC. DRAWING LIST NO. D-177RG-100 DATED APRIL 29, 2013 TO EXISTING **IO-390-A1A6** ENGINE CURRENTLY INSTALLED IN THIS AIRFRAME. REFER TO AIRPLANE FLIGHT MANUAL SUPPLEMENT, TN177RG-390 FOR CONTINUED AIRWORTHINESS AND OPERATING LIMITATIONS.

INSTALLATION REQUIRES THE ADDITION OF **STC SA4082NM** DATED JUNE 7 2013. INSTALLED SCAVENGE PUMP ASSEMBLY PART NUMBER **CF101633-0032** SERIAL NUMBER **SP0507031**. REMOVED EXISTING **FUEL SERVO** AND INSTALLED TURBO MODIFIED SERVO PART NUMBER **2524054-11** SERIAL NUMBER **13310**.

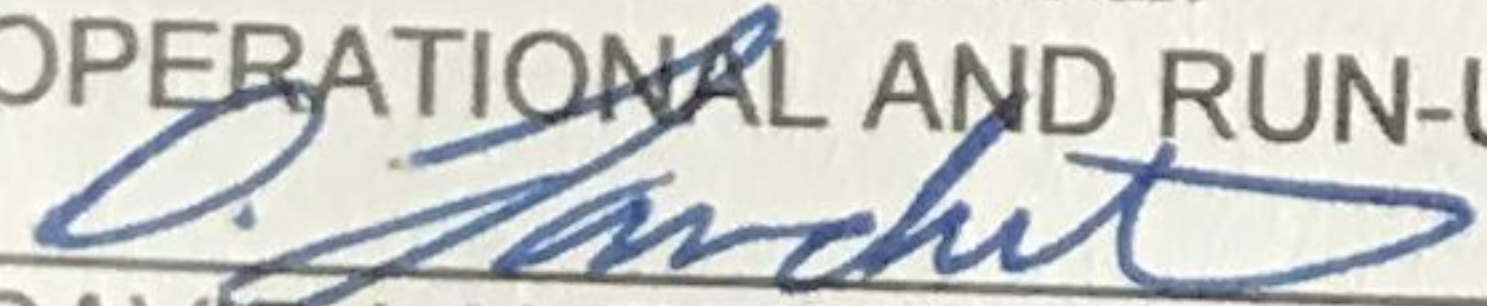
INSTALLED NEWLY OVERHAULED **FUEL PUMP** PART NUMBER **103586-01** SERIAL NUMBER **1759401**. INSTALLED NEW GAMI TURBO **FUEL INJECTORS** KIT NUMBER **GT15B-177RG** SERIAL NUMBER **20678**.

INSTALLED UNISON SLICK MAGNETO PRESSURIZATION KIT.

INSTALLATION APPROVED UNDER CURRENT TURBO SYSTEM STC.

INSTALLATION INCLUDES NEW INDUCTION AND INTERCOOLER SYSTEM APPROVED UNDER THE CURRENT DRAWING PACKAGE.

OPERATIONAL AND RUN-UP CHECKS OK.


DAVID LANDRETH A&P 2651512IA

ENGINE LOG

Serial No. _____

Date	Time		REPAIRS - ADJUSTMENTS - SERVICE - REMARKS	Signature	License Number
	Hrs	Min			

TORNADO ALLEY TURBO INC.
300 AIRPORT RD
ADA, OK 74820

ENGINE LOG BOOK ENTRY

1 AUG 2013



N53061 CESSNA 177RG SN: 177RG1334 ACFT HOBBS: 239.5 ACFT TT: 1795.6
LYCOMING IO-390-A1A6 SN: RL-191-80E ENG TSN: 43.53

COMPLETED **ANNUAL INSPECTION** USING CESSNA MAINTENANCE MANUAL AND LYCOMING MAINTENANCE MANUAL CHECKLIST.


PERFORMED AIRWORTHINESS DIRECTIVE SEARCH USING **AVANTEX DISC 2013-15**.

FOUND ALL AIRWORTHINESS DIRECTIVES COMPLIED WITH OR NOT APPLICABLE.

PERFORMED CYLINDER DIFFERENTIAL COMPRESSION CHECK RESULTS WERE #1 77/80, #2 77/80, #3 75/80, AND #4 72/80.

DRAINED ENGINE OIL AND RETAINED A SAMPLE FOR ANALYSIS. REMOVED OIL FILTER AND EXAMINED ELEMENT FOR CONTAMINATES. SERVICED ENGINE WITH 8 QUARTS OF **AEROSHELL 100 AD** OIL AND INSTALLED NEW CHAMPION OIL FILTER **CH48103-1**.

I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH AN **ANNUAL INSPECTION** AND HAS BEEN DETERMINED TO BE IN AN AIRWORTHY CONDITION.



DAVID LANDRETH A&P 2651512IA

Total to Date

Certificate Number must be shown.

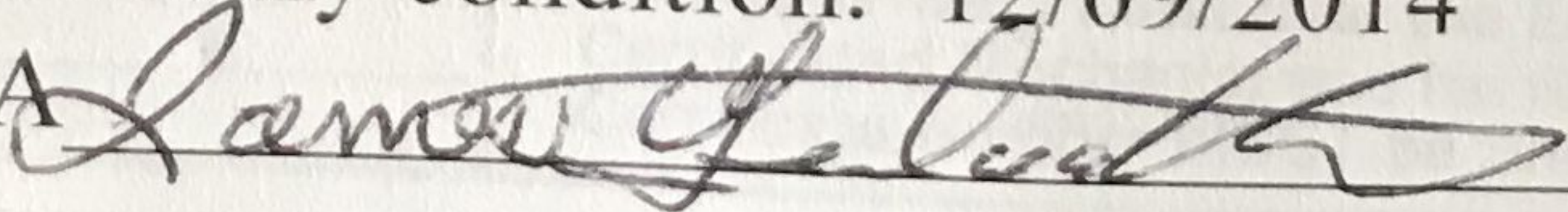
ENGINE LOG BOOK ENTRY 12/09/2014

N53061 Cessna 177RG SN: 177RG1344 ACFT. TT: 1819.16

Lycoming IO-390-A1A6 SN. RL-191-8-E Eng. TSN. 70.14

1. Rotated and tightened all clamps on oil return lines.
2. Tightened cap ends of engine driven fuel pump.
3. Service engine with Phillips 20/50 oil along with Camguard and with new oil filter. No metal found in old filter.
4. Compression checks 79/80 on all cylinders.
5. Clean, check and re-gap spark plugs. Re-install with new copper gaskets.
6. Timing checked and found to be 20 degrees BTDC.
7. Lube all engine controls and check for smooth correct movement.
8. Run-up engine and check for leaks and correct operation. Checks good.
9. All AD's complied with or are not applicable.
10. I certify that this engine has been inspected IAW. an Annual Inspection and has been found to be in an airworthy condition. 12/09/2014

James V. Ferlaak A&P2184306IA



ENGINE LOG

Serial No. _____

Date	Time		REPAIRS - ADJUSTMENTS - SERVICE - REMARKS	Signature	License Number
	Hrs	Min			
10-29-15	Tach	1834.50	ETTSN 85.48		
			Compression Check #1 ⁸⁰ / ₇₇ #2 ⁸⁰ / ₇₆		
			#3 ⁸⁰ / ₇₇ #4 ⁸⁹ / ₇₇ Changed oil & oil filter. Inspected old filter. Checked & cleaned oil pickup screen. Serviced engine with 8 qts. of Phillips XC 20W50 oil & Tempest oil filter AA48108-2. Added one pint of Castrol.		
			Cleaned, gapped & tested spark plugs. Checked mag timing. C/W continued airworthiness Rev B 77-6460004 for turbo & exhaust system. Checked induction system. Replaced induction air filter element using BA 5705.		
			Checked engine controls. Checked lines, hoses & connections. C/PAD 2015-19-07 insp. of fuel injector lines. Engine washed, ground run, checked for normal operation & leaks. No leaks noted.		
			Page Total	All Repair Data Must Bear the Endorsement of a Certificated Mechanic, and his Rating and Certificate Number MUST be Shown. (over)	
			Brought Forward		
			Total to Date		

Star Aviation Services

108 Nowlin Lane, Hangar 21

Chattanooga, TN 37421

(423) 499-1100

Serial No.

Signature

License Number

Date: November 14, 2016 N53051 C-177RG S/N: 177RG1334 Tach Time: 1876.42

Engine Lycoming IO-390-A1A6 S/N RL-191-30E TSO Rebuild 136.56

Performed 100 hr/Annual inspection with the following actions: Compression Test Results #1 76/80 #2 77/80 #3 76/80 #4 75/80. Drained oil and replaced filter. Filter inspected for contamination, none noted at this time. Installed new filter P/N AA48103-2 and safety. Serviced engine with 7 Qts. Phillips X/C 20W50 oil. Cleaned, gapped and tested spark plugs. Rotated upon installation. Installed 1 EA new spark Plug P/N REB37E in the lower position # 1 Cylinder. Check Mag timing. Replaced #2 Cylinder Intake gasket P/N 71973. Retoquered oil filler neck and safety. Oil sample taken and sent out for analysis. Replaced tie turbocharger inlet duct P/N Skeet 12 (Double Wall). Note: **AD2015-19-07 is not applicable** to this engine as this information is contained in the Maint. & Overhaul Manual. Engine operation and leak check was satisfactory. AD's were checked thru this date.

I certify that this Engine was inspection(100 HR/Annual) in accordance with the scope and detail as outlined in FAR 43 Appendix D and was found to be in a Airworthy condition with respect to the work performed and is approved for return to service.

Details are on file at Star Aviation services under W.O. # M6380P.
For Star Aviation Services

Clinton E. Renner, Jr AP34187271A

Clinton E. Renner, Jr

Certificated Mechanic, and his Rating and

ENGINE LOG

Serial No. _____

Star Aviation Services
108 Nowlin Lane, Hangar 21
Chattanooga, TN 37421
(423) 499-1100

TACU: 1915.41

N53061

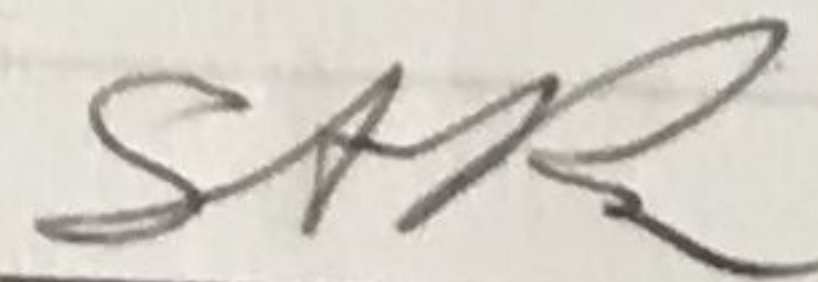
2 Feb 2017

177RG1334

Hobbs: 374.7

Drain engine oil and removed oil filter. Cut open filter no metal noted at this time. Installed new oil filter AA48108-2 and serviced with 7 qts Phillips 20W50 engine oil. Removed #2 induction cyl gasket and installed new gasket for leaking p/n 71973. Adjusted Slope control for 29.6 MP at full power was hitting 31 with engine at proper Operational temps. Check on next flight.

Details are on file under W.O. # M6419P * END *



Steven D Rasor IA 3229490 A&P

Page Total

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Total to Date

All Repairs Made by
Certificated Mechanic, and his Rating and
Certificate Number are to be shown.

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ENGINE LOG

Serial No.

Date	Time	
	Hrs	M

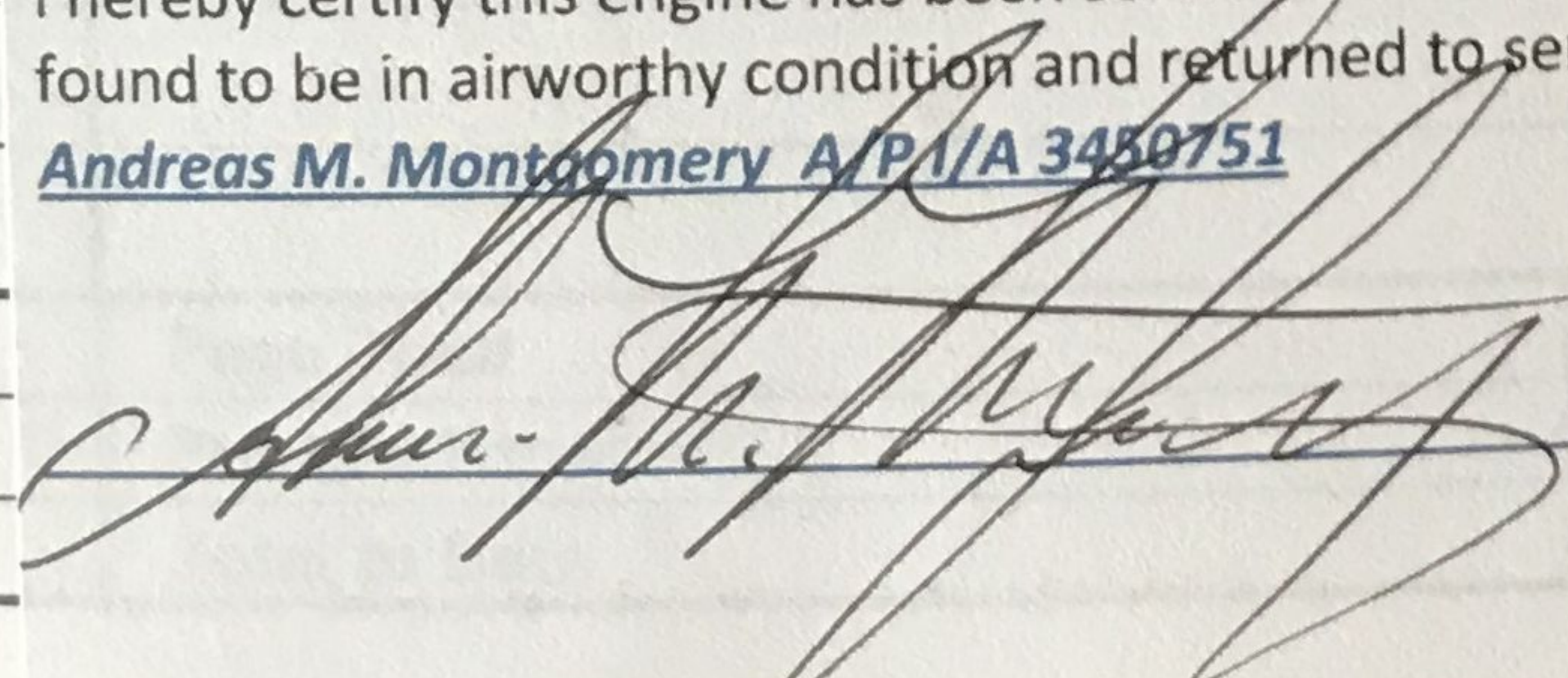
N53061
Cessna C177RG S/N: 177RG1334
Hobbs : 418.90 Tach:
Lycoming IO-390-A1A6
Engine S/N: RL-191-80E
Oil Chagne

June 9, 2017
Montgomery Aero Enterprises, LLC.
251 Dry valley Road NE
Cleveland Tennessee 37312 (KRZR)
www.montgomeryaero.com
Tel: (423) 645-7736

- Engine was serviced with new Tempest Oil filter AA48108-1 and 8 qaurts of Phillips 20W50 XC oil. Oil sample was taken for analysis and filter was cut and inspected for ferris material. None found. The engine was tested for proper operation.

I hereby certify this engine has been serviced in accordance with the factory service manual and has been found to be in airworthy condition and returned to service.

Andreas M. Montgomery A/P1/A 3450751



License Number

f a

ENGINE LOG

Serial No. _____



Peak Aviation
 1587 Aviation Way
 Colorado Springs, Colorado, 80916

N53061

Engine Maintenance Log Entry

Entry	Date	Total Hours	Tach Time	Hobbs	Description of Work Completed	Mechanic	FAA Cert
1		266.7	1995.5	471.4	Completed an ANNUAL Inspection on this engine using Cessna Maintenance Manual and Lycoming Maintenance Manual Checklist. Drained oil and serviced with 8 quarts of Aeroshell W100+. Removed, cut open and inspected old oil filter, no particles noted at this time. Installed a new AA48108-2 Oil filter. Performed compression checks, compressions as follows: Cyl. 1: 76/80, Cyl. 2: 70/80, Cyl. 3: 74/80 and Cyl. 4: 71/80. Removed, cleaned, inspected, gapped and reinstalled spark plugs. Installed new spark plug gaskets. All AD's current or Not applicable.	Robert K Pickett	A&P 3710569 IA

I certify this AIRCRAFT has been inspected in accordance with an ANNUAL INSPECTION as per the aircraft manufacturer's inspection criteria and was determined to be in an AIRWORHTY condition.

Robert K Pickett

Page Total

Brought Forward

Total to Date

All Repair Data Must Bear the Endorsement of a Certificated Mechanic, and his Rating and Certificate Number MUST be Shown.



ROCKY MOUNTAIN
AIRCRAFT SERVICES LLC

11750 Airport Way Hanger B-12A
Broomfield CO, 80021

Date: 3/20/2019
Acft Reg: N53061
Flight Tach: 2038.87
SMOH: 294.37
ENGINE

Performed an Annual inspection in accordance with FAR 43 App (D) and Cessna checklist. Drained oil and serviced sump with 7 Qts Aeroshell W100 oil and a pint of cam gaurd. Removed old oil filter and cut for inspection, no contaminants found. Installed torqued and safetied new tempest oil filter P/N 48108. Removed all spark plugs and cleaned, gapped and tested. Rotated plugs and reinstalled torquing to 32 ft.lbs and using (8) new M674 gaskets. Compressions as follows #1 78 #2 62 #3 72 #4 68 all over 80 PSI. Inspected fuel and oil screens as required. Magneto to engine time was satisfactory. Replaced magneto filter with new 1396-2 filter. **Next due for replacement March 2022.** Ground Run/Ops/Leak check all satisfactory at this time. I certify that this Engine has been inspected in IAW an Annual inspection and has been found to be in airworthy condition and is approved for return to service at this time.-----END-----

Justin C Parrow

A&P3083586IA

	License Number

Page Total
Brought Forward
Total to Date

All Repair Data Must Bear the Endorsement of a Certificated Mechanic, and his Rating and Certificate Number MUST be Shown.

