

N315EN

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.)
2013				
8/12	05.8		1848.8	Removed Engine from N78PA Ken Bawing come

Engine IO-540-S1A5 S/N 61P-0451-173 TT: 1844.8 TSOH: 0.0 Date: 01/22/2015  
S.A.S. L-17345-48A

Engine major OH was performed at this time, assembly was performed with the following parts, Oh crankcase LW-13827 S/N 1832, OH crankshaft IO-540S1A5, new camshaft LW-19340, new crankshaft bearings LW-11575 and LW-13885, new cyl. piston/ring assy. 05K21118 and piston pin plugs 60828, piston cooling nozzles 73772, INS piston pins, new connecting rod bearings 18N26106-M03 bolts 75060 and nuts LW-12186, RP connecting rods LW10646, new body assy-oil pump LW-14389 and impeller kit 05K23463, OH hyd. units 78290, new hyd. tappet body 15B26262, RP gear 76786, INS gears, RP tach shaft 76155, RP rocker arms, new rocker shafts LW-13790, new bearing 67542, INS hardware, new gasket set LW-18072, new ball 1028-B and spring LW-11713, OH fuel pump RG17980J S/N C-509, OH mag 10-349310-1 S/N D239103FR, OH mag 10-349290-1 S/N A191441, new harness M2157 and plugs URHB32E. I certify that this engine was overhauled IAW manufacturer specifications and Dyno/test ran by Barrett Precision Engines Inc. Engine preserved for storage to be installed at a later date.

At 01/22/13  
KED:shd

Log Book Entry  
Engine Model: IO-540 S1A5  
Serial Number: L-17345-48A

Date: 1/22/15  
W.O. 11720

TSN: Unk  
TSO: Unk

Installed new fuel line clamps, checked fuel line tightness. Installed new thermostatic bypass valve. Removed accessory case and set internal timing. Re-installed accessory case. Timed magnetos to 20 degrees. Safety wired governor drive shaft plug, drain plug, filter and vernathern.

Engine tested on dynamometer after repairs. Removed and cut oil filter. No FOD detected. Installed and torqued new AA48110-2 oil filter.

Differential compressions were: 1-72/80, 2- 70/80, 3-73/60, 4-70/80, 5-72/80, 6-70/80.

No other work accomplished at this time.

This engine has been repaired, tested and found to be in airworthy condition and is approved for return to service.

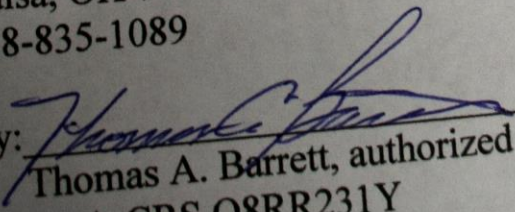
FAA-form 8130-3 issued.

Details of this repair are on file at this facility under W.O. 11720

For information about this engine contact:

Barrett Precision Engines, Inc.  
2870-B North Sheridan Road  
Tulsa, OK 74115  
918-835-1089

By:

  
Thomas A. Barrett, authorized signature  
FAA-CRS Q8RR231Y

19 TIME FLIGHT SERVICE MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)

N315EN LH eng. IO-540-S1A5 S/N L-17345-48A TSOH: 0.0 HOBBS: 3185.2 Date: 4-21-2017

Oh'd engine was previously dyno./ test ran by Barrett Precision Engines Inc., Installed engine to airframe Aerostar PA60-601P S/N 61P-0451-173, installed serviceable vacuum pump 241CC-13 S/N 0BAT02 with TT227.2, scavenge pump OH'd 300110-0020H S/N 751, waste gate actuator repaired RJ8003-4 S/N 1325, oil cooler OH'd 8541336 S/N 10333, LH turbocharger rebuilt CF600575-9001 S/N H-TR1113024, RH turbo rebuilt CF600575-9002 S/N H-TR1013017, RH waste gate OH'd 32006-509, LH waste gate OH'd 32006-517, installed serviceable Fuel servo RSA-10ED1 S/N 59959 with TT104.2, All flexible fluid hoses from firewall forward replaced with new part number list on file with logs, new starter 149NL/ec, new slick harness M2157, new spark plugs URHB32E, filled with 12qt. mineral oil for break in, test ran engine to confirm operation/ leak check, appropriate adjustments made, test flight successful, work was perform IAW maintenance manual installation instructions and rigged to specifications.

Steele Aerospace Services  
Steele A. Sensintaffar  
A+P 3582404 IA



N315EN LH eng. IO-540-S1A5 S/N L-17345-38A TSOH: 15.4 HOBBS: 3200.6 Date: 5-25-17

*Break in oil + filter was changed at this time, w/ Aeroshell 100W - SAS*  
Replaced waste gate actuator with serviceable unit due to manifold pressure issues, unit installed P/N RJ8003-4 S/N 1270, test run and leak check confirmed operation.

Steele Aerospace Services LLC  
Steele A. Sensintaffar  
A+P 3582404 IA



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N315EN LH Power Plant IO-540-S1A5 S/N L-17345-48A TSOH: 66.4 Hobbs: 3251.4 Date: 1-5-2018

Inspected Power Plant IAW checklist provided by the manufacturer, Cyl. compression (1) 77/80 (2) 77/80 (3) 79/80 (4) 79/80 (5) 78/80 (6) 79/80, cleaned, gapped, and tested spark plugs, replaced induction air filter element, changed oil with aeroshell 100W and filter CH48110-1, cleaned air-oil separator screen, washed engine, test run was successful, no leaks found at this time, All applicable AD's complied with to this date, I certify this Power Plant to comply with the annual inspection checklist, and was determined to be in an airworthy condition on this date: 1-5-2018.

Steele Aerospace Services  
Steele A. Sensintaffar  
A+P 3582404 IA



**BOOMTOWN AVIATION LLC.**  
OKLAHOMA CITY, OKLAHOMA

JAMES "ROCKE" TYLER, A&P, IA  
WILEY POST AIRPORT, KOWA  
HANGER 1502

**Left engine**

25 Sept 2019

Smith Aerostar PA-60-601P, s/n 61P-0451-173, N315EN

**Lycoming IO-540-S1A5, s/n L-17345-48A**

Hobbs 3252.2, SMOH 67.0

**100-HOUR INSPECTION** was performed IAW **Continental** service manual and FAR 43, apdx D. Performed hot compression test, #1 79/80, #2 79/80, #3 78/80, #4 79/80, #5 78/80, #6 78/80, Min 42., cleaned fuel filter and replaced seals. Cleaned and tested all spark plugs, tested all ignition leads. Checked Magneto timing to engine, 20 degrees BTDC. Drained hot oil, took oil sample, removed oil filter, cut filter open & no abnormalities were found. Installed new oil filter p/n CH48110-1 and serviced engine with 12 quarts of Aeroshell 100W oil. Removed and cleaned fuel injectors, replaced all O-rings. Inspected turbo for end play and wobble. Lubed all engine controls.

500-hour magneto inspection due @ Hobbs **3685.2**

"I certify that this **ENGINE** has been inspected in accordance with **100-HOUR INSPECTION** and was determined to be in airworthy condition."

Kevin Tucker A&P 4051467

*Kevin Tucker*