

# AIRCRAFT TECHNICAL RECORD

## Section 3. ENGINE LOG

ENGINE DATA

1. Make LYCOMING
2. Model I0-360-C1C
3. Specification \_\_\_\_\_
4. Manufacturer's Serial Number L-11098- 51A
5. Date of Manufacture \_\_\_\_\_
6. Aircraft Inspection Cycle \_\_\_\_\_



# Section 3A: Engine Service and Maintenance Log

DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES		DESCRIPTION OF WORK PERFORMED (INSPECTION, REPAIRS, REPLACEMENT)
	HOURS	min	HOURS	min	Sub Total	TOTAL	
BROUGHT FORWARD	→						

January 14, 2015

## EXODUS AIR SERVICE

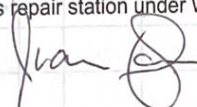
4555 West Ave "G" Ste#6 (WJF)  
Engine M/N IO-360-C1C

Lancaster, California 93536  
S/N L-11098-51A

Phone (661) 942-6489  
Eng. T.T. 5,519.34

This engine was disassembled, cleaned, inspected, repair in service after oil contamination, and re-assembled after the following work: tachometer shaft overhauled by Aircraft Specialties Services, Inc. Camshaft overhauled by Nickson's Machine Shop Inc. Magnetos inspected by Exodus, Crankcase repaired by Divco. Rocker arm overhauled by Exodus, all engine parts were inspected by Active Magnetic, Sun Valley, CA. Cylinder's repair in service by Exodus. Accessories not overhauled at this time. The following parts were replaced at engine assembly: SL13792 Crankshaft seal, 18N26106 Connecting rod bearing's, 18D26096 Main bearings, 18A26093 Front main bearing, LW-12186 Nut connecting rod, LW-31H0.88 Idler shaft bolt, STD-2168 Nut idler shaft, 73772 Oil nozzle, 78528 Oil pump housing. 75441-1 Gasket set, 72877 Body lifter, 05k19423s Impeller kit, 75060 Connecting rod bolt, STD-2246 Crankshaft bolt, 05K22035 Ring set, 76121 Tachometer shaft, 74389 Rocker arm bushings, ASC10207 Piston. Engine identified above was repaired and inspected in accordance with current Regulations of Federal Aviation Agency and is approved for return to service. All ADs checked and in compliance through this date, see profile (report) provided with records package. Pertinent details of the repair are on file at this repair station under Work Order No.895

Juan Paiz Certificate # 3593017



## N316EF February 23, 2015 Engine Log

Tachometer Reading: 2,914.34 Hobbs 0110.0 AFTT& ETT: 5,519.34

Time Since Major Overhaul: 0.00

Make: Lycoming Model: IO- 360-C1C S/N: L-11098-51A.

Annual inspection in accordance with scope and detail of appendix D of part 43 to code of Federal regulations chapter 14.

- Engine removed from aircraft and sublet to Exodus Air Service for overhaul due to metal chips found in oil filter & oil pump inlet screen. Engine reinstalled after overhaul.
- Engine serviced with Brake In oil.
- Lycoming recurring AD 2004-10-14C Due at any propeller strike or at engine overhaul.
- Lycoming recurring AD 2011-26-04. Complied with at this time by inspection of fuel injector lines and clamping. Next due 100 hrs or if any maintenance that effects fuel injector lines.
- Airworthiness directives checked and in compliance through 2015-04.
- Ground ran for operation check and leak check. All checked satisfactory.
- All work done in accordance with the appropriate chapter, page and section with Piper Maintenance Manual Part number

I certify that this engine has been inspected in accordance with an annual inspection and was determined to be in airworthy condition. Bruce Allan Bell A&P 34441071A.

NAME/  
SIGNATURELICENCE:  
AME or  
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## FAA - PMA

This tag certifies that Sky-Tec Model No. 149-NL  
 Serial No. FN-381443 was manufactured new on 22 Sep 2014  
 by Sky-Tec under the authority of FAA-PMA No. PQ0852SW  
 Supplement No. 7 in accordance with Sky-Tec's  
 FAA-Approved Quality System (14CFR Part 21, Subpart K).  
 This article has been determined to be airworthy.  
 For installation eligibility see [www.skytecair.com/eligibility.htm](http://www.skytecair.com/eligibility.htm)  
 Starter Installed on N 316EP by Bruce Allan Bell  
 (Aircraft) (Mechanic)

TACHOMETER: 0055 3444107 A&amp;P IN

4/22/2015

Form CC1108-1

Note: New 0000.0 Reading Tachometer Installed  
 4/15/2015 at Airframe Total Time: 5547.55

New Tachometer range markings painted on face from  
 specifications found in Pilot's Operating Hand Book.

Propeller and propeller governor adjusted and aircraft test  
 flown to insure engine RPM within normal range.

This Aircraft is returned to service 4/16/2015 at airframe  
 Total time: 5547.55.

Bruce Allan Bell A&amp;P 3444107 I.A.

Bruce Allan Bell

OLD TACH TIME : 2942.55

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# Section 3A: Engine Service and Maintenance Log

DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES		DESCRIPTION OF WORK PERFORMED (INSPECTION, REPAIRS, REPLACEMENT)
	HOURS	min	HOURS	min	Sub Total	TOTAL	
BROUGHT FORWARD							



**Encore**  
FLIGHT ACADEMY

*Engine Log:* N316EF July 18, 2015

Tachometer: 0070.0 Hobbs Meter: 0230.8

Airframe & Engine Total Time: 5,617.55

Engine Time Since Major Overhaul: 98.21

Lycoming: IO-360-C1C. Serial Number: L-11098-51A.

*Annual inspection in accordance with scope and detail of FAR 43 Appendix D.*

- Compression test performed hot. #1. 74/80, #2. 70/80, #3. 75/80 & #4. 72/80. PSI.
- Drained engine oil, removed oil filter and cut open for inspection. Removed oil pump inlet screen and inspected. Cleaned screen, reinstalled with new copper crush gasket & safety wired cap.  
New oil filter P/N: CH48110-2 installed & safety wired. Nothing abnormal noted.  
Refilled engine sump with 8 quarts of new Aeroshell W100 Plus oil.
- All spark plugs removed, cleaned, gapped, spark tested and inspected. Spark plugs reinstalled with new M674 copper gaskets.
- Magneto timing checked and found at 25° BTDC specification.
- Removed fuel injectors and cleaned. Reinstalled. Complied with Lycoming recurring AD. Per **AD 2011-26-04(h)** MSB No.342F. By inspection. Next due at any service that effects the fuel injector lines
- **AD 2004-10-14C.** Due at any propeller strike.
- **AD 2015-02-07.** Not applicable due to engine model. Not Aerobatic.
- All Airworthiness directives checked and in compliance through 2015-15.
- Work accomplished per Overhaul Manual Direct Drive Engine Sixth Printing December 1974 Part No. 60294-7
- Ground ran for operation check and leak check. All checked satisfactory per:  
Piper Aircraft Corporation Pilot's Operating Handbook for PA-28R-200.

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I certify that this engine has been inspected in accordance with annual inspection and was determined to be in airworthy condition. *Bruce Allan Bell A&P 3444107 I.A. Bruce Allan Bell*

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NAME/  
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AME or  
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# Encore

## FLIGHT ACADEMY

16700 Roscoe Blvd. Van Nuys CA 91406

N316EF Engine Log: November 20, 2015

Tachometer: 170.9 Airframe Total Time: 5,718.45

Lycoming Engine Model: 10-360-C1C. Serial Number: L-11098-51A.

Engine Total Time: 5,718.45 Time Since Major Overhaul: 199.11

Annual hour inspection in accordance with scope and detail of appendix D of part 43 to code of Federal regulations chapter 14.

- All spark plugs removed, cleaned, gapped, tested, inspected and reinstalled with new M674 gasket. Found cracked plug in cylinder #2 and then replaced with new spark plug of same type and kind.
- Engine oil drained, oil filter removed and cut open for inspection. No abnormalities noted. Oil pump inlet screen inspected and cleaned. Reinstalled screen. New oil filter installed and engine oil sump refilled with 7 quarts of Aeroshell W100 plus.
- Compression Test #1 69/80, #2 70/80, #3 69/80, #4 72/80.
- Checked timing found to be set at 25° BTDC specification.
- Airworthiness directives checked and in compliance through 2015-23.
- Ground ran for operation check and leak check. All checked satisfactory.

I certify that this engine has been inspected in accordance with an Annual inspection and was determined to be in airworthy condition. Bruce Allan Bell A&P 3444107 I.A.

*Bruce Allan Bell 11/20/2015*

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## FLIGHT ACADEMY

Aircraft Registration Number: N316EF

Date: February 18, 2016.

Tachometer: 269.4      Airframe Total Time: 5,816.95

Lycoming Engine Model: IO-360-C1C. Serial Number: L-11098-51A.

Engine Total Time: 5,808.95 Time Since Major Overhaul: 297.61

Annual hour inspection in accordance with scope and detail of appendix D of part 43 to code of Federal regulations chapter 14.

- All spark plugs removed, cleaned, gapped, tested, inspected and reinstalled with new M674 gasket. Found cracked plug in cylinder #2 and then replaced with new spark plug of same type and kind.
- Engine oil drained, oil filter removed and cut open for inspection. No abnormalities noted. Oil pump inlet screen inspected and cleaned. Reinstalled screen. New oil filter installed and engine oil sump refilled with 7 quarts of Aeroshell W100 plus.
- Compression Test #1 72/80, #2 72/80, #3 73/80, #4 71/80.
- Checked timing found to be set at 25° BTDC specification.
- Airworthiness directives checked and in compliance through 2016-04.
- Ground ran for operation check and leak check. All checked satisfactory.

All work done in accordance with the appropriate chapter, page and section with Piper Arrow Maintenance Manual.

I certify that this **engine** has been inspected in accordance with an **Annual** inspection and was determined to be in airworthy condition. Bruce Allan Bell A&P 3444107 I.A. *Bruce Allan Bell*

A. Bruce Alan Bell

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All work  
Maintenance  
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NAME/  
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Aircraft Registration Number: N316EF

Date: July 11, 2016.

Tachometer: 323.8 Airframe Total Time: 5,871.35

Lycoming Engine Model: IO-360-C1C. Serial Number: L-11098-51A.

Engine Total Time: 5,863.35 Time Since Major Overhaul: 352.01

50 Hour Inspection per Encore 50 Hour check list.

- Engine oil drained, oil filter removed. New oil filter P/N CH48110-2 installed and engine oil sump refilled with 8 quarts of Aeroshell W100 Plus.

I certify that this **engine** has been inspected in accordance with an **50** inspection and was determined to be in airworthy condition. Bruce Allan Bell A&P 3444107 I.A.

*Bruce Allan Bell*

# Encore

## FLIGHT ACADEMY

16700 Roscoe Blvd. Van Nuys CA 91406

Aircraft Registration Number: N316EF

Date: October 1, 2016.

Tachometer: 366.8 Airframe Total Time: 5,914.35

Lycoming Engine Model: IO-360-C1C. Serial Number: L-11098-51A.

Engine Total Time: 5,906.35 Time Since Major Overhaul: 395.01

Annual hour inspection in accordance with scope and detail of appendix D of part 43 to code of Federal regulations chapter 14.

- All spark plugs removed, cleaned, gapped, tested, inspected and reinstalled with new M674 gasket.
- Engine oil drained, oil filter removed and cut open for inspection. No abnormalities noted. Oil pump inlet screen inspected and cleaned. Reinstalled screen. New oil filter installed and engine oil sump refilled with 7 quarts of Aeroshell W100 plus.
- Compression Test #1 78/80, #2 74/80, #3 76/80, #4 72/80.
- Checked timing found to be set at 25° BTDC specification.
- AD 2015-19-07 Complied with by inspection of fuel injection lines. Next due 110 hrs at 476.8 or at any service that affects fuel injector lines.
- No propeller strike to date. AD 2004-10-14C due at engine overhaul or any occurrence of a propeller sudden stoppage or strike.
- Airworthiness directives checked and in compliance through 2016-19.
- Ground ran for operation check and leak check. All checked satisfactory.

All work done in accordance with the appropriate chapter, page and section with Piper Arrow Maintenance Manual.

I certify that this **engine** has been inspected in accordance with an **Annual** inspection and was determined to be in airworthy condition. Bruce Allan Bell A&P 3444107 I.A.

*Bruce Allan Bell*



# Section 3A: Engine Service and Maintenance Log



**Encore**  
FLIGHT ACADEMY

Engine Log: N316EF

Date: 08/29/2017

TACH: 0464.5

Engine TT: 6012.05

TSMOH: 0492.71

Make: Lycoming Model: IO-360-C1C S/N: L-11098-51A

Performed 100HR inspection in accordance with Lycoming Service Manual and FAR Part 43 Appendix D.

Performed the following maintenance items:

1- Drained oil, replaced oil filter P/N AA48110-2 and refilled engine oil with 8 quarts of Aeroshell W100 plus.

2- Removed all spark plugs, cleaned, tested and reinstalled.

3- Cleaned and checked oil pump inlet oil screen, cleaned screen and reinstalled with new crush gasket.

4- Performed engine compression check, #1 72/80 #2 75/80 #3 76/80 #4 76/80.

5- Checked engine to magneto timing.

6- Replaced alternator with overhauled Alternator P/N 4111810 S/N H-M102421. See Aero Accessories FAA repair station #XB2R286L WO #43960 for details of repair.

7- AD 2017-16-11 Connecting rod failure, is not applicable by date of overhaul 1/24/2015.

8- C/W AD 2015-19-07 fuel line and clamp inspection I/A/W para (e)(ii) of AD and Lycoming Engines MSB No.

342G, check ok. Next due TACH 0574.5 (each 110 hr.).

9- Performed engine run up, all checks are good.

See AD compliance report for currency.

I certify that this **Powerplant** has been inspected in accordance with a **100HR** inspection and is determined to be in airworthy condition and is approved for return to service

*Michael Maisch*

Michael Maisch

A&P3352212

I certify that this **Powerplant** has been inspected in accordance with an **ANNUAL** inspection per Title 14 CFR, Part 43 Appendix D, and is determined to be in an airworthy condition and is approved for return to service.

*Anthony Ast*

Anthony Ast

3737987IA

N316EF Engine Logbook Entry

10/20/2017

TACH: 510.3

Performed the following maintenance items in accordance with Piper Maintenance Manual.

1- Drained oil, replaced oil filter P/N AA48110-2 and refilled engine oil with 8 quarts of Aeroshell W100 plus.

2- Removed all spark plugs, cleaned, tested and reinstalled.

Aircraft approved for return to service-----END.

*Michael Maisch*

Michael Maisch

A&P3352212

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**Encore**  
FLIGHT ACADEMY

NAME  
SIGNATURE

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CATEGORY

Engine Log: N316EF

Date: 04/02/2018

Tach: 564.0

TSMOH: 592.21

Engine TT: 6111.55

Make: Lycoming Model: IO-360-C1C S/N: L-11098-51A

Performed **100-Hour** inspection in accordance with Piper Service Manual and FAR Part 43 appendix D.

Performed the following maintenance items;

1. Drained oil, replaced oil filter P/N AA48110-2 and refilled engine oil with 7 Qts. Of Aeroshell W100 Plus.
2. Removed all spark plugs cleaned, tested and reinstalled.
3. Removed all fuel injector nozzles, cleaned and reinstalled.
4. Cleaned and checked oil pump inlet oil screen, cleaned screen and reinstalled with new crush gasket.
5. Performed engine compression check #1 74/80 #2 76/80 #3 75/80 #4 75/80.
6. Checked engine to magneto timing.
7. **C/W AD 2015-19-07 Fuel Line and Clamp Inspection.** In compliance with para. (e)(ii) of AD and Lycoming MSB No. 342G, check ok. **Next Due TACH 664.0 (every 100 hr.)**
8. Performed engine run up, all checked ok.

I certify that this **engine** has been inspected in accordance with a **100-Hour** inspection and is determined to be in airworthy condition and is approved for return to service

Michael Maisch  
A&P3352212

I certify that this **Engine** has been inspected in accordance with an **ANNUAL** inspection per Title 14 CFR, Part 43 Appendix D, and is determined to be in an airworthy condition and is approved for return to service.

  
Anthony Ast  
3737987IA

ENGINE LOG: N316EF

DATE: 09/27/2019

TACH: 605.9

TSMOH: 634.11

ENGINE TT: 6153.45

MAKE: LYCOMING  
MODEL: IO-360-C1C  
S/N: L-11098-51A

Performed **100-Hour** inspection in accordance with Piper Service Manual and FAR Part 43 appendix D.

Performed the following maintenance items;

1. Drained oil, replaced oil filter P/N AA48110-2 and refilled engine oil with 7 Qts. Of Aeroshell W100 Plus.
2. Removed all spark plugs cleaned, tested, and reinstalled.
3. Cleaned and checked oil pump inlet oil screen, cleaned screen and reinstalled with new crush gasket.
4. Performed engine compression check #1 73/80 #2 78/80 #3 78/80 #4 74/80.
5. Removed left magneto, Slick P/N 4372, S/N 98100651 for 500 hr. service and reinstalled. See Aero Accessories FAA Repair Station (#XB2R286L), WO# 48016 for details of repair.
6. Removed right magneto, Slick P/N 4370, S/N 96020048 for 500 hr. service and reinstalled. See Aero Accessories FAA Repair Station (#XB2R286L), WO# 48017 for details of repair.
7. **C/W AD 2015-19-07 Fuel Line and Clamp Inspection,** I/A/W para. (e)(ii) of AD and Lycoming MSB No. 342G, Check ok. **Next Due TACH 705.9 (each 100 hr.)**
8. Performed engine run up, all checked ok.

See AD compliance report for currency

I certify that this **Engine** has been inspected in accordance with a **100-Hour** inspection and is determined to be in airworthy condition and is approved for return to service.

Michael Maisch  
A&P3352212

I certify that this **Engine** has been inspected in accordance with an **Annual** inspection per Title 14 CFR Part 43 Appendix D, and is determined to be in an airworthy condition and is approved for return to service.

  
Anthony Ast  
3737987IA