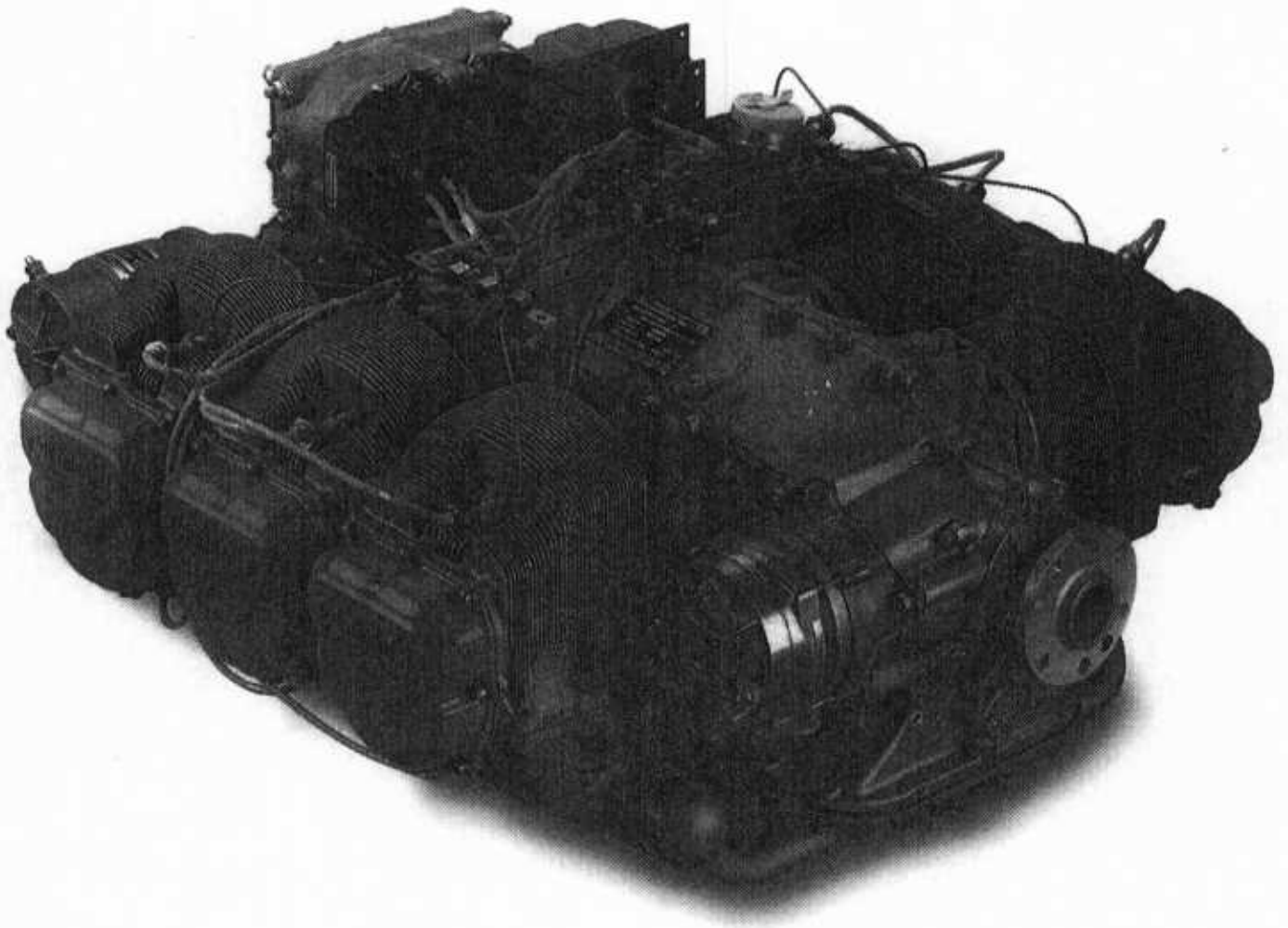


# ENGINE LOG BOOK



**Teledyne Continental Motors, Inc.**

### Service Information

Service Bulletins and Technical Publications are available on a direct mail basis from the factory. Orders must be prepaid. Send for order form or call 334-438-3411, publications department, for information.

### Engine Returns

All returned engines are to be shipped with this log book Directly to:

Teledyne Continental Motors  
2039 Broad Street  
Mobile, AL 36615

**USE ONLY FUEL CONFORMING TO ASTM D910  
USE OF AUTOMOTIVE GAS IS NOT APPROVED.**



**Teledyne Continental Motors, Inc.**

A Teledyne Technologies Company

Printed: 05/03/2007

This engine model 10F240B5 Serial No. 400143 was manufactured on 04/30/2007 by Teledyne Continental Motors in accordance with approved design data and the applicable requirements of Part 21 of the Federal Aviation Regulation. The approved design data for this engine incorporates all changes required by applicable Airworthiness Directives and Teledyne Continental Motors Service Bulletins.

*M. J. Wood 070503*

**TELEDYNE CONTINENTAL MOTORS**

A TELEDYNE TECHNOLOGIES COMPANY

PRODUCTION CERTIFICATE NO. 505

Date	Total Time		Time Since Last Overhaul		<b>Engine Service and Maintenance Record</b> Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	

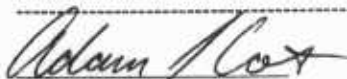
A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL.

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 07/03/2007

TACH TIME: 25.4 Hrs.  
ENGINE TT: 25.4 Hrs.

At this time, the engine oil was drained and the filter was removed, opened, and inspected for contamination - none noted at this time. The engine was serviced with six quarts of Phillips 20w50 X/C oil and one Kelly Aerospace ES48108 oil filter. The engine was washed and run. No defects were noted.

-----END-----

  
Adam J. Cope  
AP 3035886

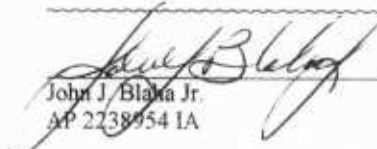
A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL.

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 08/08/2007

TACH TIME: 35.4 Hrs.  
ENGINE TT: 35.4 Hrs.

At this time, the induction tubes were removed, inspected, and reinstalled. The ignition harness was replaced, PN 10-821454-15. The #2 spark plugs were replaced, 2 ea. PN RHM38E; and the #2 fuel injector, SN 0603-116, was replaced with a new injector, PN 655788, SN 0624-039. The right FADEC, PN 657093-1 Rev. D, SN 0639042, was removed and a new FADEC was installed, PN 657093-1 Rev D, SN 0722050. The engine was test run and no defects were noted.

-----END-----

  
John J. Blaha Jr.  
AP 2238954 1A


A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL.

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 10/12/2007

TACH TIME: 72.6 Hrs.  
ENGINE TT: 72.6 Hrs.

At this time, the engine oil was drained and the filter was removed, opened, and inspected for contamination - none noted at this time. The engine was serviced with six quarts of Aeroshell 15w50 oil and one Champion CH48110-1 oil filter. The engine was washed and run, no leaks noted.

-----END-----

  
Nelson E. Cadwallader  
AP 327504630

Date	Total Time		Time Since Last Overhaul		<b>Engine Service and Maintenance Record</b> Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	

Brought For


A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 03/26/2008

TACH TIME: 132.8 Hrs.  
ENGINE TT: 132.8 Hrs.

Complied with TCM SSI07-6 by replacing both FADEC ECU assemblies this time and date.  
Removed Left ECU p/n 657093-2, s/n 0705235, and reinstalled p/n 657440-2, s/n 0705226A.  
Removed right ECU p/n 657093-1, s/n 0722050, and reinstalled p/n 657440-1, s/n 0714032A.  
Performed satisfactory ground run-up and diagnostics test.

-----END-----

  
Kirk J Nelson  
AP5050292171A  
Teledyne Continental Motors

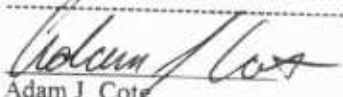
A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL.

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 04/05/2008

TACH TIME: 133.2 Hrs.  
ENGINE TT: 133.2 Hrs.

At this time, the engine oil was drained and the filter was removed, opened, and inspected for contamination - none noted at this time. The engine was serviced with six quarts of Aeroshell 15w50 oil and one Champion CH48108-1oil filter. The engine was washed and run. No defects were noted

-----END-----

  
Adam J. Cote  
AP 3035886

A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 07/15/2008

TACH TIME: 174.6 Hrs.  
ENGINE TT: 174.6 Hrs.

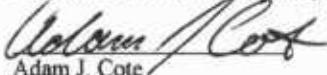
Record  
Inspection

Brought

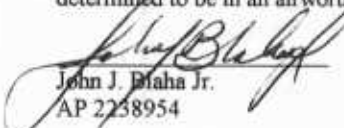
At this time, the engine was cleaned for inspection. All components were inspected and lubed in accordance with an **ANNUAL INSPECTION** per Liberty and Teledyne Continental Service Manuals. The oil and filter was changed using 6qts Aeroshell 15w50 and one Champion CH48108-1 filter. The old filter was cut open and inspected, no contamination noted. A compression test was performed with the following results: #1- 76/80, #2- 76/80, #3- 79/80, and #4- 78/80. The spark plugs were cleaned, inspected, gapped, tested, and rotated. The ignition leads were cleaned and tested. The induction filter was cleaned and oiled. The engine was ground run, and checked for leaks - no leaks were noted at this time. All AD's were checked thru bi-weekly 2008-13.

-----  
END

I certify this engine has been inspected in accordance with a 100-HOUR INSPECTION and was determined to be in an airworthy condition.

  
Adam J. Cote  
AP 3035886

I certify this engine has been inspected in accordance with an ANNUAL INSPECTION and was determined to be in an airworthy condition.

  
John J. Blaha Jr.  
AP 2238954

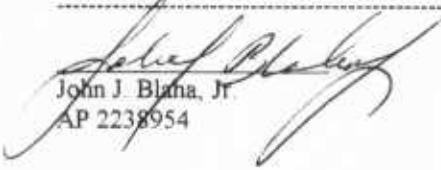
A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL.

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 10/02/2008

TACH TIME: 195.1 Hrs.  
ENGINE TT: 195.1 Hrs.

At this time, the spark plugs were removed, cleaned, tested, and reinstalled. The fuel injectors were removed, cleaned, inspected, and reinstalled. Performed a level 1 maintenance download and failed. The FADEC speed sensor was removed, P/N 655427 S/N 0640122, and a new speed sensor was installed, P/N 655427 S/N 0824031. The low voltage control harness, P/N 655996 was removed and a new low voltage control harness, P/N 655996, S/N 0809048 was installed from Teledyne Continental Motors, W/O# P74347. The right-hand electronic control unit (cylinders 1 & 2) was removed, P/N 657440-1, Rev A., S/N 714032A, and a new electronic control unit, P/N 657440-1, S/N 0819004, was installed from Teledyne Continental Motors, W/O# P74347. The #2 cylinder fuel injector, P/N 655788 was removed and a new fuel injector, P/N 655788, S/N 0816008, was installed from Teledyne Continental Motors, W/O# P74347. Ground ran and ops checked normal. A data download was performed by Teledyne technical representative.

-----  
END

  
John J. Blaha, Jr.  
AP 2238954

Date	Total Time		Time Since Last Overhaul		<b>Engine Service and Maintenance Record</b> Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	

Brought Forward

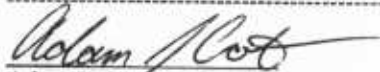
A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL.

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 02/02/2009

TACH TIME: 220.1 Hrs.  
ENGINE TT: 220.1 Hrs.

At this time, the engine oil was drained and the filter was removed, opened, and inspected for contamination - none noted at this time. The engine was serviced with six quarts of Aeroshell 15w50 oil and one Champion CH48108-1 oil filter. The engine was washed and run. No defects were noted.

-----END-----

  
Adam J. Cote  
AP 3035886


A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL.

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 06/20/2009

TACH TIME: 252.3 Hrs.  
ENGINE TT: 252.3 Hrs.

At this time, the throttle position switch was replaced, P/N 657126. The inline fuel filter was cleaned, inspected, and installed using a new o-ring, P/N AS3578-020. The fuel distributor screen was cleaned, inspected, and installed using a new gasket, P/N 656077-3, and a new o-ring, P/N 656077-2. Ops check ok.

-----END-----

  
Adam J. Cote  
AP 3035886

A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL.

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 08/03/2009

TACH TIME: 271.1 Hrs.  
ENGINE TT: 271.1 Hrs.

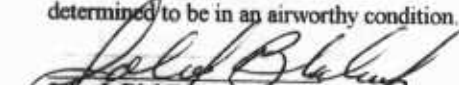
At this time, the engine was cleaned for inspection. All components were inspected and lubed in accordance with an **ANNUAL INSPECTION** per Liberty and Teledyne Continental Service Manuals. The oil and filter was changed using 6qts Aeroshell 15w50 and one Champion CH48108-1 filter. The old filter was cut open and inspected, no contamination noted. A compression test was performed with the following results: #1- 76/80, #2- 70/80, #3- 74/80, and #4- 75/80. The spark plugs were cleaned, inspected, gapped, tested, and rotated. The ignition leads were cleaned and tested. The oil pressure relief valve was removed, cleaned, and reinstalled with a new seal ring. The rocker box cover screws were tightened. The fuel injectors were removed, cleaned, and reinstalled. The engine was ground run, and checked for leaks - no leaks were noted at this time. All AD's were checked thru bi-weekly 2009-15.

-----END-----

I certify this engine has been inspected in accordance with a **100-HOUR INSPECTION** and was determined to be in an airworthy condition.

I certify this engine has been inspected in accordance with an **ANNUAL INSPECTION** and was determined to be in an airworthy condition.

  
Jeremy D. Brzycki  
AP 2773579

  
John J. Blahn Jr.  
AP 2238954



Date

A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL.

ord  
ctions,

Brought Fo

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 11/09/2009

TACH TIME: 294.8 Hrs.  
ENGINE TT: 294.8 Hrs.

At this time, Performed a level 1 maintenance download and failed. Found and repaired wiring to the MAP sensor. Ground ran and ops checked normal. A data download was performed and passed.

-----END-----

Adam J. Cote  
AP 3035886

A & M Maintenance Services, Inc. - 1C5  
Clow International Airport, Bolingbrook, IL.

TYPE: Liberty XL-2  
"N" #: N 583XL  
DATE: 03/10/2010

TACH TIME: 304.4 Hrs.  
ENGINE TT: 304.4 Hrs.

At this time, a Level 1 Maintenance Download was performed and failed. The FADEC speed sensor was removed, P/N 655427 S/N 0824031, and a new speed sensor was installed, P/N 655427 S/N 080465. The engine oil was drained and the filter was removed, opened, and inspected for contamination - no contamination in filter, gear tooth found in engine oil sump. The starter was removed, P/N BC320-1 S/N 03078700S, and replaced with new, P/N BC320-1 S/N 01104658S. The crankshaft gear was removed and replaced with new, P/N 626762, using new bolts, 4ea P/N 22532. The camshaft gear bolts were replaced with new, 4ea P/N 22534. All associated gaskets were replaced as needed. The engine was serviced with six quarts of Aeroshell 15w50 oil and one Champion CH48108-1 oil filter. The engine was washed and run. No defects were noted. A Post Maintenance Level 1 data download was performed and passed.

-----END-----

Adam J. Cote  
AP 3035886

22 APR 10 316 - - - Adj. fuel pressure I/A/W TCM M22  
MM. Performed Level 1 run; with a result of  
Pass. Engine is OK for return to service.

AP3011468

END

3 Tom Lambrecht Drive  
Romeoville IL 60446  
Ph: (866)606-5327  
Fax: (888)475-7538



WindWalker  
AVIATION SERVICES LLC

**ENGINE**  
REG#: N583XL  
IOF240B5 S/N: 400143  
TACH: 348.3

**Accomplished The Following:**

- Complied with an Annual Inspection per CFR 43 Appendix D and using the Liberty XL-2 & TCM Service Manuals as a reference.
- Compression Check: #1- 74/80, #2- 64/80, #3- 74/80, #4- 74/80 /80.
- Drained oil, inspected filter, installed new CH48108-1 filter and serviced engine with 6 qts AeroShell 15W50 oil. Ground run leak checks good.

**I CERTIFY THAT THIS AIRCRAFT / ENGINE / PROPELLER HAS BEEN INSPECTED IN ACCORDANCE WITH AN ANNUAL INSPECTION, AS PER PART 43 APPENDIX D, AND WAS DETERMINED TO BE IN AN AIRWORTHY CONDITION. NO OUTSTANDING AD NOTED AT THIS TIME. DETAILS ARE ON FILE AT WINDWALKER AVIATION SERVICES LLC FOR THE WORK LISTED.**

Signed:

09/03/2010

WO#: 1709

ENGINE MODEL: IOF-240-B  
 ENGINE S/N: 400143  
 REG. NO: N583XL  
 WORK ORDER: 137-10-2011



**J.A. Air Center**  
 Repair Station No. NF2R029L  
 43W730 US RT 30  
 Sugar Grove, Illinois 60554  
 Phone: 630.584.3200

DATE: 14 October, 2011  
 A/C TSN: 404 4  
 ENG TT: 404 4  
 TSMOH:  
 TACH: 404 4

**Engine Entries**

- 2. This engine was inspected and serviced as per the Liberty and TCM service manuals for an annual inspection. Compressions were tested as follows. #1/75, #2/70, #3/76 & #4/75 all over 80 PSI. The oil and filter were changed. Opened and inspected the oil filter. Serviced engine with Aeroshell 15W50 oil and installed new filter p/n AA48110-2.
- 9. Adjusted idle speed to 650-700 RPM.
- 10. Installed 4 new exhaust rocker cover gaskets p/n 655704
- 14. Torqued cam shaft cover plate IAW SB96-7C.

**Maintenance Release**

I certify the aircraft and/or component(s) on was repaired and/or inspected in accordance with an annual inspection, and current regulations of the Federal Aviation Administration and was found Airworthy for return to service. Pertinent details of the repair are on file at this repair station CRS NF2R029L under Work Order No. 137-10-2011, Dated 14 October, 2011.

DATE: 14 October, 2011

SIGNED: *Don Morgan*  
 Don Morgan  
 Certified Repair Station No. NF2R029L

Work Order: 137-10-2011

Printed by EBIS 3 (datamedia.com)

REG. NO.	N583XL	<b>MIDWEST AVTECH INC.</b> <b>I.V. REGIONAL AIRPORT</b> <b>4241 ED URBAN DR.</b> <b>PERU, IL 61354</b>	DATE	07/31/12
MAKE	TCM		FHM	446.9
MODEL	IO-240-B		T.T.	
S/N	400143			
DRAINED OIL, INSPECTED AND REPLACED FILTER, SERVICED SYSTEM WITH AEROSHELL 15W50 - GROUND RUN AND LEAK CHECK GOOD				
THE AIRCRAFT OR ENGINE IDENTIFIED ABOVE WAS REPAIRED AND INSPECTED IAW CURRENT FARs - ONLY THE WORK DESCRIBED ABOVE IS APPROVED FOR RETURN TO SERVICE				

BRYAN G. HARTMAN

*Bryan Hartman*

A&P 354729066 IA

REG. NO.	N583XL	<b>MIDWEST AVTECH INC.</b> <b>I.V. REGIONAL AIRPORT</b> <b>P.O. BOX 451</b> <b>PERU, IL 61354</b>	DATE	01/01/13
MAKE	TCM		TACH	469.5
MODEL	IOF-240-B		T.T.	469.5
S/N	400143		SMOH	
DRAINED OIL, INSPECTED AND REPLACED FILTER, SERVICED SYSTEM WITH AEROSHELL 15W50 - CLEANED, GAPPED, TESTED AND ROTATED SPARK PLUGS - CHECKED COMPRESSION #1 - 74/80 #2 - 65/80 #3 - 75/80 #4 - 71/80 - REPLACED #4 INTAKE GASKET (P/N 649963) - GROUND RUN AND LEAK CHECK GOOD				
I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IAW FAR 43 APPENDIX D FOR AN ANNUAL INSPECTION AND WAS FOUND TO BE IN AN AIRWORTHY CONDITION				

BRYAN G. HARTMAN

*Bryan Hartman*

A&P 354729066 IA

REG. NO.	N583XL	<b>MIDWEST AVTECH INC.</b> <b>I.V. REGIONAL AIRPORT</b> <b>4241 ED URBAN DR.</b> <b>PERU, IL 61354</b>	DATE	06/04/13
MAKE	TCM		FHM	478.5
P/N	IOF-240-B5		T.T.	
S/N	400143			
DRAINED OIL, REPLACED FILTER, SERVICED SYSTEM WITH AEROSHELL 15W50 - GROUND RUN AND LEAK CHECK GOOD				
THE AIRCRAFT OR ENGINE IDENTIFIED ABOVE WAS REPAIRED AND INSPECTED IAW CURRENT FARs - ONLY THE WORK DESCRIBED ABOVE IS APPROVED FOR RETURN TO SERVICE				

BRYAN G. HARTMAN

*Bryan Hartman*

A&P 354729066 IA



REG. NO.	N583XL
MAKE	TCM
MODEL	IOF-240-B
S/N	400143

MIDWEST AVTECH INC.  
I.V. REGIONAL AIRPORT  
P.O. BOX 451  
PERU, IL 61354

DATE	02/13/14
TACH	496.4
T.T.	496.4
SMOH	

Date

Brought For

DRAINED OIL, INSPECTED AND REPLACED FILTER, SERVICED SYSTEM WITH AEROSHELL 15W50 - CLEANED, GAPPED, TESTED AND ROTATED SPARK PLUGS - CHECKED COMPRESSION #1 - 72/80 #2 - 62/80 #3 - 75/80 #4 - 70/80 - GROUND RUN AND LEAK CHECK GOOD

I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IAW FAR 43 APPENDIX D FOR AN ANNUAL INSPECTION AND WAS FOUND TO BE IN AN AIRWORTHY CONDITION

CHARLES M. STUDER

*Charles M Studer*

A&P 337545845 IA

ord  
tions,

REG. NO.	583XL
MAKE	TCM
MODEL	IOF-240-B
S/N	400143

MIDWEST AVTECH INC.  
I.V. REGIONAL AIRPORT  
P.O. BOX 451  
PERU, IL 61354

DATE	07/31/14
HOBBS	502.7
TT	

DRAINED OIL, INSPECTED AND REPLACED FILTER, SERVICED SYSTEM WITH AEROSHELL 15W50 - GROUND RUN AND LEAK CHECK GOOD

THE AIRCRAFT OR ENGINE IDENTIFIED ABOVE WAS REPAIRED AND INSPECTED IAW CURRENT FARs - ONLY THE WORK DESCRIBED ABOVE IS APPROVED FOR RETURN TO SERVICE

AARON R. DELHOTAL

*Aaron R Delhotal*

A&P 3614153

REG. NO.	N583XL
MAKE	TCM
MODEL	IOF-240-B
S/N	400143

MIDWEST AVTECH INC.  
I.V. REGIONAL AIRPORT  
P.O. BOX 451  
PERU, IL 61354

DATE	05/14/15
TACH	520.7
T.T.	520.7
SMOH	

INSPECTED ENGINE USING TCM AND LIBERTY CHECKLISTS AS A GUIDE - DRAINED OIL, INSPECTED AND REPLACED FILTER, SERVICED SYSTEM WITH AEROSHELL 15W50 - CLEANED, GAPPED, TESTED AND ROTATED SPARK PLUGS - CHECKED COMPRESSION #1 - 78/80 #2 - 68/80 #3 - 77/80 #4 - 76/80 - GROUND RUN AND LEAK CHECK GOOD

I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IAW FAR 43 APPENDIX D FOR AN ANNUAL INSPECTION AND WAS FOUND TO BE IN AN AIRWORTHY CONDITION

CHARLES M. STUDER

*Charles M Studer*

A&P 337545845 IA

REG. NO.	N583XL
MAKE	TCM
MODEL	IOF-240-B
S/N	400143

MIDWEST AVTECH INC.  
I.V. REGIONAL AIRPORT  
P.O. BOX 451  
PERU, IL 61354

DATE	06/24/16
TACH	540.5
T.T.	540.5
SMOH	

INSPECTED ENGINE USING TCM AND LIBERTY CHECKLISTS AS A GUIDE - DRAINED OIL, INSPECTED AND REPLACED FILTER, SERVICED SYSTEM WITH AEROSHELL 15W50 - CLEANED, GAPPED, TESTED AND ROTATED SPARK PLUGS - CHECKED COMPRESSION #1 - 70/80 #2 - 68/80 #3 - 70/80 #4 - 72/80 - GROUND RUN AND LEAK CHECK GOOD

I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IAW FAR 43 APPENDIX D FOR AN ANNUAL INSPECTION AND WAS FOUND TO BE IN AN AIRWORTHY CONDITION

CHARLES M. STUDER

*Charles M Studer*

A&P 337545845 IA

REG. NO.	N583XL
MAKE	TCM
MODEL	IOF-240-B
S/N	400143

MIDWEST AVTECH INC.  
I.V. REGIONAL AIRPORT  
P.O. BOX 451  
PERU, IL 61354

DATE	06/22/17
TACH	557.8
T.T.	557.8
SMOH	

INSPECTED ENGINE USING TCM AND LIBERTY CHECKLISTS AS A GUIDE - DRAINED OIL, INSPECTED AND REPLACED FILTER, SERVICED SYSTEM WITH AEROSHELL 15W50 - CLEANED, GAPPED, TESTED AND ROTATED SPARK PLUGS - CHECKED COMPRESSION #1 - 72/80 #2 - 70/80 #3 - 74/80 #4 - 70/80 - GROUND RUN AND LEAK CHECK GOOD

I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IAW FAR 43 APPENDIX D FOR AN ANNUAL INSPECTION AND WAS FOUND TO BE IN AN AIRWORTHY CONDITION

CHARLES M. STUDER

*Charles M Studer*

A&P 337545845 IA

