

AIRCRAFT S/N
42-AC026

AIRCRAFT TECHNICAL LOGS

Section 1. AIRFRAME

29



Position: #1:
#2:

AMO 1-77

Altimeter Calibration Test Record

Work Order #: K48781
Altimeter S/N: 457532

Altitude (Feet)	Tol (+/- Ft)	Altimeter Reads
-1000	20	-19
0	20	-12
500	20	-8
1000	20	+0
1500	25	+0
2000	30	+5
2500	30	+4
3000	30	+7
4000	35	+4
6000	40	-7
8000	60	-21
10000	80	-35

Altitude (Feet)	Tol (+/- Ft)	Altimeter Reads
12000	90	-46
14000	100	-39
16000	110	-28
18000	120	-11
20000	130	+15
22000	140	-
25000	155	-
30000	180	-
35000	205	-
40000	225	-
45000	230	-
50000	280	-

Hysteresis 16
Case Leak 0
Date 29-Oct-12

Friction 55
After Effect 4
Completed By

AIRCRAFT

1. Nationality and Registration N236TS
2. Manufacturer's Designation DA 42
3. Manufacturer's Serial Number 42.AC022
4. Type Approval or Specification Number A57CE
5. Date of Manufacture 2006
6. Aircraft Inspection Cycle _____

ENGINEERING RECORD

2

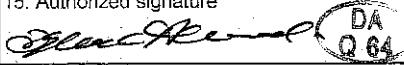
INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE NUMBER

DA
Q 42

1. Approving national aviation authority/country TRANSPORT CANADA	2	AUTHORIZATION RELEASE CERTIFICATE TCCA 24-0078			3. Form tracking No. RO - 0535
4. Approved organization name and address DIAMOND AIRCRAFT INDUSTRIES INC., 1560 CRUMLIN SIDEROAD, LONDON, ONTARIO CANADA N5V 1S2			5. Work order/contract/invoice RO-06-341		
6. Item 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	7. Description Fuel Quantity Probe	8. Part No. D60-2817-13-00-ASY ***** END *****	9. Eligibility* DA 42	10. Qty. 1	11. Serial/batch No. N/A
12. Status/work MANUFACTURED					
13. Remark MANUFACTURED NEW PART DIAMOND AIRCRAFT INDUSTRIES GmbH AUSTRIA RECEIVER NUMBER RCN86584					
14. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data and are in condition for safe operation. <input type="checkbox"/> Non approved design data specified in block 13.		19. Certifies that, except where otherwise specified in block 13, the work identified in block 12 and described in block 13 was performed in accordance with CAR 571. <input type="checkbox"/> CAR 571.10 Maintenance release. <input type="checkbox"/> Other regulations specified in block 13.			
15. Authorized signature 	16. Certificate/Approval ref. No. TC161-93	20. Authorized signature	21. Certificate/Approval ref. No. AMO # 161-93		
17. Name IQBAL AHMAD	18. Date (dd/mmm/yyyy) 20 December, 2006	22. Name	23. Date (dd/mmm/yyyy)		
User/Installer Responsibilities					
<p>1 This document does not constitute authority to install the part.</p> <p>2 Where the installer works in accordance with the national regulations of an airworthiness authority other than the authority specified in Block 1, the installer must ensure that his/her airworthiness authority accepts products or maintenance for the airworthiness authority specified in Block 1.</p> <p>3 Statement 14 and 19 do not constitute installation certification. In all cases, the aircraft technical record must contain an installation certification issue accordance with the national regulations of the state of registry, before the aircraft may be flown.</p>					

*Installer must cross-check eligibility with approved data

ENGINEERING RECORD

3

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

Date: December 20, 2006
WO#: RO-06-341 S/N: 40.AC022 Reg #: N236TS TTAF: 6.3 Hrs

I have carried out an independent check of the Flight/Powerplant controls affected by the work accomplished.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

Signature

Lic or Stamp

1. Approving National Aviation Authority/Country: FAA/UNITED STATES	2. AUTHORIZED RELEASE CERTIFICATE FAA FORM 8130-3, AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: A98527	
4. Organization Name and Address: Honeywell International, Inc. (PR2R093L) One Technology Center 23500 West 105th Street Olathe, Kansas 66061				5. Work Order/Contract/Invoice Number: A98527		
6. Item:	7. Description:	8. Part Number:	9. Eligibility*	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:
1	KS 270C	065-00178-2500	N/A	1	8337	REPAIRED

13. Remarks:

Complies with AD #2000-05-24

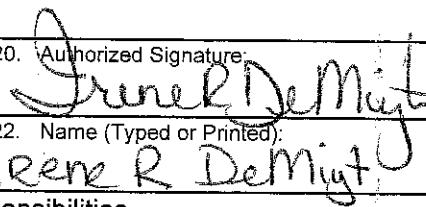
Repaired per KS 270C CMM 006-15618-0000 Rev 0: March/01

Tested per OEM approved document 924-01334-0000 Rev 32

Complied with Service Memo 292 per 600-08292-0007 Rev 7

"Honeywell International, Inc. certifies that the work specified in Blocks 12 and 13 was performed in accordance with EASA Implementation Rule part 145 approval, and with respect to that work, the aircraft component is considered ready for release to service under EASA approval number EASA.145.4140."

Repairman Certificate Number: **8544507**

14. Certifies the items identified above were manufactured in conformity to: <input type="checkbox"/> Approved design data and applicable condition for safe operation <input type="checkbox"/> Non-approved design data specified in Block 13	19. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input checked="" type="checkbox"/> Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service. 
15. Authorization/Signature:	16. Approval/Certificate No:
17. Name (Type or Printed):	18. Date (m/d/y):
19. Name (Type or Printed):	20. Authorized Signature:
21. Approval/Certificate No:	22. Name (Type or Printed):
23. Date (m/d/y):	

User/Installer Responsibilities

It is important to understand that the existence of this Document alone does not automatically constitute authority to install the part/component/assembly.

Where the user/installer performs works in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1 it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1.

Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

1. Approving National Aviation Authority/Country: FAA/UNITED STATES	2. AUTHORIZED RELEASE CERTIFICATE FAA FORM 8130-3, AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: A49858	
4. Organization Name and Address:		Honeywell International, Inc. (PR2R093L) One Technology Center 23500 West 105th Street Olathe, Kansas 66061			5. Work Order/Contract/Invoice Number: A49858	
6. Item:	7. Description:	8. Part Number:	9. Eligibility*:	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:
1	KS 271C	065-00179-0500	N/A	1	8042	MODIFIED

13. Remarks:

Installed KS 271C-9 per 600-01516-0090 Rev 0: Aug/04
 Repaired per KS 271C CMM 006-15647-0000 Rev 0: May/04
 Tested per OEM approved document 924-01337-0000 Rev 21
 Complied with Service Memo 292 per 600-08292-0007 Rev 7
 Complies with AD #2000-05-24.

"Honeywell International, Inc. certifies that the work specified in Blocks 12 and 13 was performed in accordance with EASA Implementation Rule part 145 approval, and with respect to that work, the aircraft component is considered ready for release to service under EASA approval number EASA.145.4140."

Repairman Certificate Number: **2231280**

14. Certifies the items identified above were manufactured in conformity to:		19. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 13
<input type="checkbox"/> Approved design data and are in a condition for safe operation <input type="checkbox"/> Non-approved design data specified in Block 13		Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.
15. Authorized Signature:	16. Approval/Authorization No:	20. Authorized Signature:
17. Name (Typed or Printed):	18. Date (m/d/y):	21. Approval/Certificate No: PR2R093L
		22. Name (Typed or Printed): Bertha Jones
		23. Date (m/d/y): Jan/12/2005

User/Installer Responsibilities

It is important to understand that the existence of this Document alone does not automatically constitute authority to install the part/component/assembly.

Where the user/installer performs works in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1 it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1.

Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

1. Approving National Aviation Authority/Country: FAA/United States	2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG					3. Form Tracking Number: 6311/446
4. Organization Michelin Aircraft Tire Corp. 515 Michelin Road, Building 56 Greenville, SC 29602						5. Work Order, Contract, Invoice or Pick No: DIDS6311N20
6. Item: 1. 15X6.0-6/6/160 Aircraft Tire	7. Description: 061-501-0	8. Part Number: TSO Article N/A	9. Eligibility: * 1	10. Quantity: 6257W00277	11. Serial/Batch Number: New	12. 0 Page Attached Status/Work:

3. Remarks.:

DIRECT SHIPMENT AUTHORIZATION

limited life parts must normally be accompanied by maintenance history including total time/total cycle/time since new.

14. Certifies the items identified above were manufactured in conformity to:

Approved design data are in a condition for safe operation.
 Non-approved design data specified in Block 13.

14 CFR 43.9 Return to Service Other regulation specified in Block

Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.

15. Authorized Signature:

16. Approval/Authorization No:

DMIR 511237CE

20. Authorized Signature:

NA

21. Approval Certificate Number:

NA

17. Name (typed or printed):

M.Jittakorn Sukto

18. Date:

19-Sep-06

22. Name (typed or printed):

NA

23. Date:

NA

User/Installer Responsibilities

It is important to understand that the existence of this Document alone does not automatically constitute authority to install the part/component/assembly.

Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the Airworthiness Authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts part/components/assemblies from the airworthiness authority of the country specified in Block 1.

Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					
The Aircraft, <u>Airframe</u> , Engine, Propeller, Appliance, Radio or Instrument was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and with respect to the work performed is approved for return to service by Modern Aero, Inc. FAA CRS #MZER198L					
 Authorized By			<u>35338</u> Work Order		
Date: <u>8/15/07</u> N# <u>2367S</u>			Acft Hrs: <u>101.0</u>		
Diamond DA-42 S/N: 42.AC022		N2367S 08-15-07		Tach: 101.0 Acft T.T.: 101.0	
Completed the following Maintenance:					
1. Installed spiral wrap on the coolant hose on the forward part of the radiator and fitted the bottom cowl to check for clearance. Clearance found to be satisfactory. Serviced coolant reservoir. 2. Removed the L/H Propeller (M/N: MTV-6-A-C-F; S/N: 05554) at 117.1 time since new and install the repaired Propeller (M/N: MTV-6-A-C-F; S/N: 06446), with 74.2 time since new.					
Modern Aero, Inc. 14801 Pioneer Trail Eden Prairie, MN 55347 WO# 35338 Date: 08-15-07 CRS MZER198L End					
					
CARRIED FORWARD					

1. Approving National Aviation Authority/Country: FAA/UNITED STATES		2. AUTHORIZED RELEASE CERTIFICATE FAA FORM 8130-3, AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: 1761744	
4. Organization Name and Address: Cessna Aircraft Company Cessna Parts Distribution Dept. 702 5800 E Pawnee, Wichita, KS 67218						5. Work Order/Contract/Invoice Number: 762579	
6. Item: 7	T. Description: LAMP	8. Part Number: 34-0428070-64	9. Eligibility: N/A	10. Quantity: 1	11. Serial/Batch Number: N/A	12. Status/Work: New	
13. Remarks: AIRWORTHINESS APPROVAL - PARTS. THIS FORM IS NOT AN EXPORT APPROVAL.							
PO# M12864							
14. Certifies the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 13.							
15. Authorized Signature: <i>Kenneth Wysocki</i>		16. Approval/Authorization No.: 100129CE					
17. Name (Typed or Printed): KENNETH E. WYSOCKI SR., ODAR		18. Date (m/d/y): OCT/02/2007					
User/Installer Responsibilities It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

FAA Form 8130-3 (6-01)

NSN: 0052-00-012-9009

ITEM: 7	PN: 34-0428070-64	QTY: 1
ORDER: 1761744N/101: N/A	U/M: EA	DESC: LAMP

N2367S WO356

1. Approving National Aviation Authority/Country: FAA/United States	2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG	3. Form Tracking Number: 7370/211				
4. Organization Name and Address: Michelin Aircraft Tire Company, LLC 515 Michelin road Greenville, SC 29605 (TSOA PT 1283 CE)	Michelin Siam Co., Ltd 57 Moo 6 Nongplakradee Rd. Nongplamore, NongKhae, Saraburi 18140 (TSOA PT 1283CE-DX)	5. Work Order/ Contract/Invoice Number: DIDS7370N7				
6. Item: 1	7. Description: 15X6.0-6/6/160	8. Part Number: 061-501-0	9. Eligibility: * N/A	10. Quantity: 1	11. Serial/Batch Number: 7253W00341	12. Status/Work: NEW
13. Remarks: DIRECT SHIPMENT AUTHORIZATION						
14. Certifies the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 13.			19. <input type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return service.			
15. Authorized Signature: 		16. Approval/Authorization No: DMIR 511237CE		20. Authorized Signature: NA	21. Approval/ Certificate Number: NA	
17. Name (Typed or Printed): M.Jittakorn Sukto		18. Date (m/d/y): 20-Sep-07		22. Name (Typed or Printed): NA	23. Date (m/d/y): NA	

User/Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly.

Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts part/components/assemblies from the airworthiness authority of the country specified in Block 1.

Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

N2367S WO 35664

Approving National Aviation Authority/Country: FAA/United States	2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG					3. Form Tracking Number: 7370/211
Organization Name and Address: Michelin Aircraft Tire Company, LLC 515 Michelin road Greenville, SC 29605 (TSOA PT 1283 CE)	Michelin Siam Co., Ltd 57 Moo 6 Nongplakradee Rd. Nongplamore, NongKhae, Saraburi 18140 (TSOA PT 1283CE-DX)					5. Work Order/ Contract/Invoice Number: DIDS7370N7
Item: 7. Description: 1 15X6.0-6/6/160	8. Part Number: 061-501-0	9. Eligibility: * N/A	10. Quantity: 1	11. Serial/Batch Number: 7253W00341	12. Status/Work: NEW	

3. Remarks: **DIRECT SHIPMENT AUTHORIZATION**

4. Certifies the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 13.	19. <input type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.		
5. Authorized Signature: 	16. Approval/Authorization No: DMIR 511237CE	20. Authorized Signature: NA	21. Approval/ Certificate Number: NA
7. Name (Typed or Printed): M.Jittakorn Sukto	18. Date (m/d/y): 20-Sep-07	22. Name (Typed or Printed): NA	23. Date (m/d/y): NA

User/Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly.

Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts part/components/assemblies from the airworthiness authority of the country specified in Block 1.

Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

AIR TIME AND

CARRIED FORWARD

ENGINEERING RECORD

5

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE NUMBER

Diamond DA-42

N236TS

Tach : 118.8

S/N: 42.AC022

01-11-08

Acft T.T.: 118.8

Completed the following Maintenance:

1. Performed an Annual Inspection referencing the Diamond DA-42 Maintenance Manual.
2. Researched AD's through the bi-weekly issue #2007-26F. All AD's are in compliance at this time.
3. Performed the annual ELT Inspection in accordance with FAR 91.207(d). Operational checks satisfactory, battery expiration date is Sep 2011.
4. Removed the L/H, R/H, and Nose Wheels. Cleaned, inspected, greased with Aeroshell #5, and reinstalled all wheel bearings, no defects found. Reinstalled all wheels.
5. Cleaned and lubricated the landing gear and aircraft as required.
6. Removed, charged, and reinstalled the Aircraft Battery (P/N: RG24-15M; S/N: 40145372), operation checked satisfactory.
7. Removed, inspected, and reinstalled the L/H and R/H Fuel Caps, using a new o-rings.
8. Complied with AD 2007-23-14 by modifying the engine electrical system by installing additional engine control unit (ECU) backup batteries. Updated the Weight and Balance and inserted a temporary revision in the P.O.H.
9. Removed and installed a new R/H Aft Navigational Light Bulb (P/N: 34-0428070-64). Operational checked satisfactory.
10. Removed and installed a new R/H Gear Up-lock Switch (P/N: 1SE-1). Operational checked satisfactory.
11. Removed and installed a new L/H Main 15x6.00x6 6ply Aviator Tire (P/N: 061-501-0; S/N: 7253W00341). Serviced the Tire to 65 PSI.
12. Lubricated the Cabin Heat Cables and inspected the valve on the firewall, no defects noted. Operational checked satisfactory.
13. Troubleshoot the TKS Panels, bled the system. Operational satisfactory. Serviced the TKS Tank with 6 gallons of fluid.
14. Removed the Co-Pilot; Reading Light, cleaned and adjusted the Switch, reinstalled, and sealed. Operational checked satisfactory.
15. Troubleshoot background noise in headsets, found a short. Repaired and tested, found satisfactory.
16. Complied with MSB 42-038/2 by installation of new modified Water Brackets (P/N: D60-7526-99-00 (x2)) using new hardware.
17. Removed and installed 2 new Alternator Excitation Batteries (P/N: LCR12-V1.3P), replacement next due is Jan 2009.

Modern Aero, Inc.

14801 Pioneer Trail

Eden Prairie, MN 55347

WO# 35664 Date: 01-11-08 CRS MZER198L

End

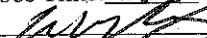
I certify that this aircraft has been inspected in accordance with an Annual/100Hour Inspection and was determined to be in airworthy condition and is approved for return to service. Pertinent details of this inspection are on file at this Repair Station under the work order listed.

Date: 1-11-08

Work Order # 35664

Tach or Hobbs Time: 118.8

Aircraft Total Time: 118.8

Signature: 

Modern Aero, Inc.
FAA Certified Repair Station #MZER198L

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETION
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD	The Aircraft, Airframe, Engine, Propeller, Appliance, Radio or Instrument was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and with respect to the work performed is approved for return to service by Modern Aero, Inc. FAA CRS #MZER198L				See Sign off → LH Eng.
	<i>1/23/08</i>				<i>35710</i>
	Authorized By				Work Order
	Date: <u>1/23/08</u> N# <u>236TS</u> Acft Hrs: <u>120.5</u>				
	The Aircraft, Airframe, Engine, Propeller, Appliance, Radio or Instrument was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and with respect to the work performed is approved for return to service by Modern Aero, Inc. FAA CRS #MZER198L				
	<i>1/23/08</i>				<i>35808</i>
	Authorized By				Work Order
	Date: <u>1/23/08</u> N# <u>236TS</u> Acft Hrs: <u>158.1</u>				
Diamond DA-42		N236TS 03-08-08		Tach : 158.1	
S/N: 42.AC022					
Completed the following Maintenance:					
1. Removed the R/H Wing Walk and installed a new Wing Walk (P/N: D60-1127-10-52-1).					
Modern Aero, Inc. 14801 Pioneer Trail Eden Prairie, MN 55347					
WO# 35808 FAA CRS # MZER198L					
End					
<i>N236TS 4/21/08 TACH 188.9</i>					
<i>Removed R/H Fuel drain from R/H Main fuel filter</i>					
<i>Installed new pln 02-7310-000801 drain valve</i>					
<i>In R/H Main fuel filter housing install new pln</i>					
<i>02-7310-04740 R1 main fuel filter with new pln</i>					
<i>02-7310-04732 R1 O-ring in R/H Main fuel filter assy</i>					
<i>Bleed R/H Fuel system. Leak check found Satisfactory</i>					
<i>ADP/IA 934725029 for Fiehla</i>					

ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

Diamond DA-42
S/N: 42.AC022

N236TS
04-21-08

Tach : 188.9

Completed the following Maintenance:

1. Removed and installed a new R/H Fuel Drain Valve (P/N: 05-7310-K000801). Removed and installed a new R/H Main Fuel Filter (P/N: 02-7310-04740R1) using a new o-ring (P/N: 02-7310-04732R1). Fueled the R/H Fuel Tank. Removed the R/H outboard engine cowling and bled the R/H Fuel System. Run-up and leak checks found satisfactory. Reinstalled the engine cowling.

Modern Aero, Inc.

14801 Pioneer Trail

Eden Prairie, MN 55347

WO# 35919 FAA CRS # MZER198L

End

Diamond DA-42
S/N: 42.AC022

N236TS
06-19-09

Tach: 212.1
Acft T.T.: 212.1

Completed the following Maintenance:

1. I certify that the altimeter, static system, transponder, and altitude reporter tests required by FARs 91.411, 91.413, and 91.217 have been performed and found to be within limits of FAR 43 appendices E & F.

Tested to 20,000 feet.

Primary Air Data Computer model number: GDC74A S/N 47806953

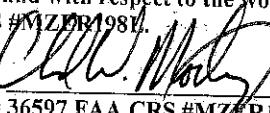
Secondary (Standby) Altimeter model number: 5934PD-3 S/N 457532

Transponder model number: GTX33 S/N 89103311

The Aircraft, Airframe, Engine, Propeller, Appliance, Radio or Instrument was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and with respect to the work performed is approved for return to service by Modern Aero, Inc. FAA CRS # MZER198L.

Modern Aero, Inc.

14801 Pioneer Trail
Eden Prairie, MN 55347

Authorized Signature: 

WO# 36597 FAA CRS # MZER198L

End

Diamond DA42
S/N: 42.AC022

N236TS
07-31-09

Tach: 224.6

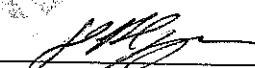
Completed the following Maintenance:

1. Updated the G1000 system software to version 0370.21. Installed as per instructions in Garmin SB 0849 revision C, contained in Diamond SI 42-108.

The Aircraft, Airframe, Engine, Propeller, Appliance, Radio or Instrument was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and with respect to the work performed is approved for return to service by Modern Aero, Inc. FAA CRS # MZER198L.

Modern Aero, Inc.

14801 Pioneer Trail
Eden Prairie, MN 55347

Authorized Signature: 

WO# AV-3247 FAA CRS # MZER198L

End

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</small>
	HRS.	MIN.	HRS.	MIN.	

B
F
Diamond DA-42
S/N: 42.AC022

N236TS
06-19-09

Tach: 212.1
Acft T.T.: 212.1

Completed the following Maintenance:

1. Performed an Annual Inspection referencing the Diamond DA-42 Maintenance Manual.
2. Researched AD's through the bi-weekly issue #2009-12F.
3. Performed the annual ELT Inspection in accordance with FAR 91.207(d), no defects noted. Operational checked satisfactory. The Battery expiration date is Sep 2011.
4. Removed the L/H, R/H, and Nose Wheels. Removed, cleaned, inspected, greased, and reinstalled the wheel bearings. Installed a new R/H Wheel Bearing (P/N: 08231) and Race (P/N: 08125) on the Nose Wheel. Reinstalled the Wheels and serviced the Main Tires to 65 PSI and the Nose Tire to 80 PSI.
5. Cleaned and lubricated the landing gear and aircraft as required.
6. Removed, serviced, and reinstalled the Aircraft Battery, no defects noted.
7. Removed and installed new Brake Linings (P/N: 066-10500) using new Rivets.
8. Removed and installed a new Emergency Battery (P/N: D60-2560-91-00). Operational check found satisfactory.
9. Installed 2 new Static Wicks (P/N: 16630) on the L/H Wing Tip.
10. Complied with AD 2008-16-20 and Diamond Mandatory Service Bulletin MSB 42-043/1 by replacing the Aileron Bellcranks referencing WI MSB42-043. Checked the rigging and travels referencing the Diamond DA42 AMM Section 6, travels found to be within limits.
11. Complied with AD 2008-23-08 and Diamond Mandatory Service Bulletin MSB42-058, Action 2, by securing the Bolts for Engine Support referencing WI MSB42-058 on the L/H and R/H Engines.
12. Removed the L/H Main Landing Gear Actuator (P/N: D60-9029-07-01; S/N: 0340) and installed a new Actuator (P/N: D60-9029-07-01; S/N: 1449). Swapped the L/H and R/H Actuators and the Supply Lines at the power pack. Adjusted the Rod End Out 2 Turns, operational check found to be satisfactory. Adjusted the Gear Door.
13. Verified the Air Speed Indicators (G1000 and Backup), the Vertical Speed Indicator (G1000), and the Magnetic Compass are indicating correctly, next due June 2011, per Chapter 5.
14. Removed and installed two new Alternator Excitation Batteries (P/N: LC-R121R3P), next due June 2010, per Chapter 5.
15. Removed and installed 4 new ECU Backup Batteries (P/N: LC-R127R2P), next due June 2010, per Chapter 5. Operational check found to be satisfactory.
16. Removed the L/H and R/H Main Landing Gear Struts, replaced the 5606 Hydraulic Fluid, and serviced with Nitrogen to 261 PSI. Reinstalled the Struts. Next due June 2011, per Chapter 5.
17. Removed the Nose Strut, disassembled, and inspected. Reassembled the Nose Strut using new O-Rings and Seals. Serviced the Nose Strut with 5606 Hydraulic Fluid and Nitrogen to 218 PSI. Reinstalled the Nose Strut. Operational check for the Nose Gear Steering and Nose Retraction found to be satisfactory. Next due June 2011, per Chapter 5.
18. Removed and installed new L/H and R/H Engine Air Filters (P/N: RB-0700). Next due at 412.1 ACTT, per Chapter 5.
19. Performed an Operational Check on the TKS System, found to be satisfactory.
20. Serviced the Accumulator of the Hydraulic System to 1150 PSI with Nitrogen.
21. Removed, cleaned, inspected, and reinstalled the De-icing Fluid Strainer.
22. Removed and installed new Main Landing Gear Down-Lock Springs (P/N: Z-2341) referencing the Diamond DA42 Maintenance Manual, Section 32-10-00.
23. Removed and installed a new Nose Gear Down-Lock Spring (P/N: Z-2371).
24. Complied with Diamond Mandatory Service Bulletin MSB42-035, Coolant Tank Cap - Pressure Relieve Test. Removed and installed a new Cap (P/N: 49090019) on the L/H Engine, found to be within limits. The R/H Engine Cap was found to be within limits. Next due 412.1 ACTT.
25. Complied with Diamond Mandatory Service Bulletin MSB42-055 by completing WI MSB42-055, installing washer on the Radiator Mounts per Table 111-1 and adjusting all the Hose Clamps for sufficient clearance and installation.
26. Complied with Diamond Mandatory Service Bulletin MSB42-062/1 by replacement of the Landing Gear Down-lock Pins referencing WI MSB42-062.
27. Complied with Diamond Mandatory Service Bulletin MSB42-070 by inspection of Nose Landing Gear Tubular Pivot Assembly. Removed and installed a new Hook Rod Assembly (P/N: D60-3233-42-00) using a new Bushing (P/N: BU2-10-06-0010-C). Removed and installed a new Nose Gear Operating Hook Assembly (P/N: D60-3233-52-00). Rigged the Nose Gear as required. Operational check found to be satisfactory.
28. Complied with Diamond Mandatory Service Bulletin MSB42-066 by installing Solenoid Valves per WI MSB42-066 at the Auxiliary Fuel Tanks. Operational and leak checks found to be satisfactory.
29. Removed and installed new L/H (P/N: D60-1127-10-51_1) and R/H (P/N: D60-1127-10-52_1) Wing Walks.
30. Inspected the Pilot's and Co-Pilot's Overhead Reading Lights. Removed the Light Assembly, repaired the tabs on the light socket, and reinstalled. Operational check found to be satisfactory.
31. Removed the Hydraulic Tank (P/N: X11-0002-A; S/N: 0153) and installed a new Tank (P/N: X11-0002-D; S/N: 0725) referencing the DA-42 Maintenance Manual, Section 29. Operational and leak checks found to be satisfactory.

I certify that this aircraft has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition and is approved for return to service. Pertinent details of this inspection are on file at this Repair Station under the work order listed.

Modern Aero, Inc.

14801 Pioneer Trail
Eden Prairie, MN 55347

Authorized Signature: 
WO# 36597 & 36235 FAA CRS FMZER198L

End

ENGINEERING RECORD

7

ENTRIES

LICENCE
NUMBER

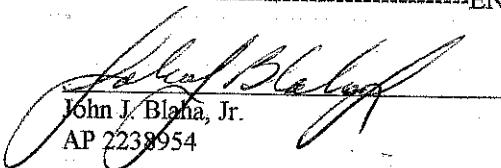
A & M Maintenance Services, Inc. - 1C5 Clow International Airport, Bolingbrook, IL

TYPE: DIAMOND DA42
"N" #: N 236TS
DATE: 10/03/2008

TACH TIME: 235.3 Hrs.
AIRFRAME T.T: 235.3 Hrs.

At this time, an operational test of the ice protection was accomplished in accordance with Diamond AMM-TR-OAM-42-053a & 054a, and Diamond Aircraft Work Instruction, WI-OSB-42-015. The airplane flight manual was updated with Diamond Aircraft Supplement S03, Doc. No. 7.01-05E. A copy of AMM-TR-OAM-42-53a & 054a was provided for insertion into DA42 maintenance manual. Aircraft placards were verified and found to be correct. Aircraft can now be operated per Diamond Aircraft DA42 airplane flight manual, supplement S03.

END


John J. Blaha, Jr.
AP 2238954

Diamond DA42

S/N: 42.AC022

N236TS

12-18-09

Tach: 238.2

Completed the following Maintenance:

1. Complied with MSB42-074/1 by installing a reinforcement plate p/n D60-5340-61-00-SB with reference to work instructions WI-MSB-42-074. Operational check of the landing gear found satisfactory.
2. Removed pitot head and inspected wiring, found corrosion under head of the screw for ground strap. Removed corrosion, installed screw and touched up paint around the screw. Ran pitot system for several minutes with aircraft on jacks, no faults found.

The Aircraft, Airframe, Engine, Propeller, Appliance, Radio or Instrument was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and with respect to the work performed is approved for return to service by Modern Aero, Inc. FAA CRS #MZER198L.

Modern Aero, Inc.
14801 Pioneer Trail
Eden Prairie, MN 55347

Authorized Signature: 
WO# 37034 FAA CRS #MZER198L

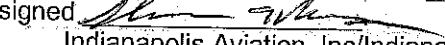
End

Date: 1/21/2010, Aircraft: N236TS, Type: DA42, S/N: 42.AC022

Tach 241.4

Airframe

Tested canopy deice spray bar. Found multiple holes clogged. Cleared clogs w/air. Bled air from spray bar. Ops check good. Serviced TKS reservoir.

The aircraft, engine, propeller, or appliance identified above was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and was determined airworthy and approved for return to service. Pertinent details of the repair are on file at this repair station under W/O #10-39207 dated 1-21-10, signed 

Indianapolis Aviation, Inc/Indianapolis Metropolitan Airport
9913 Willowview Road, Fishers IN 46038
FAA Approved Repair Station #AIHR-109C

AIR TIME AND

Diamond DA-42

S/N: 42.AC022

Completed the following Maintenance:

1. Complied with an Annual Inspection referencing the Diamond DA-42 Maintenance Manual.
2. Researched AD's through the bi-weekly issue 2010-16F.
3. Performed the annual ELT Inspection in accordance with FAR 91.207(d). Operational checked satisfactory. The Battery expiration date is Sept 2011.
4. Removed the L/H, R/H, and Nose Wheels. Removed, cleaned, inspected, greased with Aeroshell #5, and reinstalled all wheel bearings, no defects found. Reinstalled all wheels.
5. Cleaned and lubricated the aircraft and landing gear as required. Serviced the Main oleo struts to 261 PSI and the Nose oleo strut to 216 PSI with Nitrogen.
6. Removed the Aircraft Battery (M/N: RG24-15A; S/N: 40145372), charged, performed a Capacity Test, re-charged, and reinstalled.
7. Removed the Nose Landing Gear Torque Links. Installed two new Steering Braces (P/N: D60-3223-10-53) using new Bushings (P/N: PAFO8055P11) and new hardware. Reinstalled nose landing gear torque links.
8. Removed the L/H Fuel Cooler Fittings, cleaned, and reinstalled.
9. Removed and installed a new Fuel Quantity Placard (P/N: D60-1131-20-28).
10. Diamond MSB42-063/1 is not applicable due to aircraft serial number.
11. Complied with Diamond RSB42-072/2 by installing Acrylic Protective Lacquer (P/N: 155-8156) on the L/H and R/H Fire Sensors referencing WI-RSB42-072.
12. Complied with Diamond MSB42-088 by inspection of the Main Landing Gear Joints, no defects noted. Next due at 357.8 ACTT.
13. Complied with Diamond MSB42-077 by inspection and operational check of the Emergency Exit Lever referencing WI-MSB-42-077, no defects noted.
14. Updated the Safetaxi Database. Operational check found to be satisfactory.
15. Updated the Obstacle Database. Operational check found to be satisfactory.

I certify that this aircraft has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition and is approved for return to service. Pertinent details of this inspection are on file at this Repair Station under the work order listed.

Modern Aero, LLC

14801 Pioneer Trail
Eden Prairie, MN 55347

Authorized Signature: 

WO# 37504 FAA CRS #MZR198L

End

7-1-2011

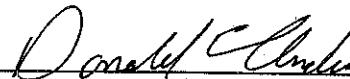
Hobbs 300.0

NORTH STAR AVIATION, INC. 3030 AIRPORT ROAD NO. MANKATO, MN 56001 NUTR521L
LOG ID# 563 01-July-2011 W/O 3970A AC TT 300.0 HOBBS 300.0
N236TS S/N 42.AC022 DIAMOND DA 42

COMPLIED WITH DIAMOND MANDATORY SERVICE BULLETIN NO. MSB42-008/13. CHECKED FOR APPROVED SOFTWARE SYSTEMS, MANIFESTS AND CONFIGURATION OF GARMIN G1000.

THE AIRCRAFT, AND/OR COMPONENT IDENTIFIED ABOVE WAS REPAIRED AND/OR INSPECTED ACCORDANCE WITH CURRENT REGULATIONS OF THE FEDERAL AVIATION ADMINISTRATION AND APPROVED FOR RETURN TO SERVICE. PERTINENT DETAILS OF THE REPAIR ARE ON FILE AT REPAIR STATION.

W.O. # 39704 TOTAL TIME IN SERVICE 300.0 DATE 7-1-2011



Authorized Individual: NUTR521L DONALD E. ANDERSON

CARRIED FORWARD

ENGINEERING RECORD

MODEL	DA42	NORTH STAR AVIATION	DATE	7/01/2011
SERIAL #	42.AC022	3030 AIRPORT ROAD	Tach.	300.0
REG #	N236TS	MANKATO, MN 56001	TT	300.0
		CRS NUTR521L		
		LOGBOOK INSERT	W/O	3966
1. Completed an annual inspection referencing the checklist contained in the DA 42 maintenance manual. 2. Inspected ELT in accordance with FAR 91.207 par (d) installed new battery P/N 455-0012 with an expiration date of Jan. 2018 3. Performed operational check of TKS system. 4. Lubricated aircraft and landing gear referencing maintenance manual chapter 12-20-00 5. Serviced aircraft battery. 6. Removed cleaned and reinstalled TKS fluid strainer. 7. Removed emergency battery and installed new battery P/N D60-2560-91-00. Next replacement due June 2013. 8. Removed and installed 2 new alternator excitation batteries P/N LC-R121R3P next replacement due June 2013. 9. Removed and installed 4 new ECU back up batteries P/N LC-R127R2P next replacement due June 2013. 10. Drained hydraulic system fluid and serviced with Mil-PRF-5606H and bleed system referencing chapter 29-10-00. Next fluid change due June 2013. 11. Serviced landing gear accumulator to 1150 psi with nitrogen. 12. Exchanged hydraulic fluid in left, right and nose landing gear struts and serviced with new Mil-PRF-5606H hydraulic fluid and serviced with nitrogen referencing chapter 32-10-00 fluid change next due June 2013. 13. Removed and installed new flap up indicator bulb P/N T4.624-20 op's check good. 14. Removed and installed new hinge pins on left gear door P/N D60-5287-73-00 and D60-5287-71-00. 15. Removed and installed new hinge pins on right gear door P/N D60-5287-74-00 and D60-5287-72-00. 16. Removed and installed new nose gear centering unit clamp half P/N D-60-3223-10-55. 17. Complied with AD 2011-10-13 and Diamond service bulletin MSB-42-083 by installing retaining bracket kit P/N MSB-42-083kit S/N CS0702715-10000 in accordance with work instructions WI-MSB42-083. No further action required. 18. Complied with Diamond service bulletin MSB-42-087/1 by inspecting for dis-bonding of the rudder bracket and clearance between T-yoke and NLG steering rod no defects noted. Service bulletin next due at 500.0 ACTT. 19. Complied with Diamond service bulletin MSB42-088/2 by inspecting left and right gear joints for cracks no defects noted. Joints Due for replacement Dec. 2011. 20. AD 2011-11-07 is due 100 hrs after July 6 2011. Replacement of main landing gear joints. 21. Removed left and right engine air filters and installed new air filters P/N RB-0700. Filters next due for replacement at 500.0 ACTT.				

I certify that this Aircraft has been inspected in accordance with an annual inspection and was determined to be in Airworthy condition.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 7/01/2011 SIGNED Jon Wieland
 Jon Wieland for North Star Aviation FAA CRS NUTR521L

I certify that the altimeter, static system, transponder, and altitude reporter test required by FARs 91.411, 91.413 & 91.217 have been performed and found to be within the limits of FAR 43 appendices E & F and AC 43.6a TESTED TO 20,000 FT

Altimeter Model 5934PD-3 #1 S/N 457532 Model GTX74A #2 S/N 47806953

Transponder Model GTX 33 #1 S/N 8910331 Model #2 S/N

Altitude Model GDS74A #1 S/N 47806953 Model #2 S/N

SIGNED John York

North Star Aviation, Inc. Mankato, MN 56001
 FAA CRS# NUTR521L W/O# 3970A

MODEL	DA 42	NORTH STAR AVIATION		DATE	9/29/11
SERIAL #	42.AC022	3030 AIRPORT ROAD			
REG #	N236TS	MANKATO, MN 56001		TT	307.5
Hobbs	N/A	FAA CRS NUTR521L			FOR COMPLETE
Tach	307.5	LOGBOOK INSERT		W/O	4177
Complied with AD 2011-11-07 by replacing left and right main gear joints P/N D64-3217-23-02 on left gear and P/N D64-3217-23-00 on right gear in accordance with Diamond service bulletin MSB 42-088/3. No further action required.					
The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.					
DATE <u>9/29/11</u> SIGNED <u>Jon Wieland</u> Jon Wieland for North Star Aviation FAA CRS NUTR521L					

JUL 25 2012 TACH TIME: 411 . 6 TACH TIME RECORDED UPON ARRIVAL



Date: July 25, 2012

WO#: RO-12-058 S/N: 42.AC022 Reg #: N236TS TACH: 411.6 Hrs.
LH Propeller MTV-6-A-C-F/CF187-129 S/N: 06446 TSN: 384.8 Hrs.

The Following work has been carried out.

Date of Manufacture May, 2006 TSN: 384.8 hrs. removed this date for Overhaul and conversion of flange from "A" to "R" version I.A.W MT-Propeller issued SI No. 48 latest revision to be eligible for reinstallation on DA 42NG Austro Engine equipped Aircraft.

Note: The prop TT recorded in the Prop log as 212.1 is in error
Previous log entry showed a difference of 26.8 between Tach and Propeller time. Prop TT corrected on this entry to 384.8 hours.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

Signature

Lic or Stamp



JUL 26 2012



Date: 26 July, 2012 S/N: 42.AC022 Reg. #: N236TS
W/O RO-12-058 TACH: 411.6 HRS.

LHE: TAE125-01 S/N: 02-01-0830 TSN: 411.6 Hrs.

The following work carried out :

Thielert Engine M/N: TAE 125-01 S/N: 02-01-0830 TSN: 411.6 Hrs.
Removed with harness and shock mounts off LH side 42.AC022 this date in serviceable condition. Compression readings as follows
Cylinder #1 70/80 #2 55/80 #3 40/80 #4 68/80
Glow plugs R & R to carry out compression check, work carried out I.A.W. Thielert Repair manual 02-01 Chapter 37 Issue 4 Rev. 11
ECU removed with engine P/N 02-7610-55003R1 S/N:2336
Performed a FADEC download and sent to Thielert. For further use Installer to comply with any outstanding AWD's or SB's

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES INC. D.O.T. APPROVAL # 161-93

Signature

Lic. Or Stamp



TACH 411 . 6

CARRIED FORWARD

ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE NUMBER

AT CYXU FOR CONVERSION TO DA42NG TYPE

agustino.

DA
ROS



Date: July 25, 2012

WO#: RO-12-058 S/N: 42.AC022 Reg #: N236TS TACH: 411.6 Hrs.
RH Propeller MTV-6-A-C-F/CF187-129 S/N: 06447 TSN: 411.6 Hrs.

The Following work has been carried out.

Date of Manufacture May, 2006 TSN: 411.6 hrs. removed this date for Overhaul and conversion of flange from "A" to "R" version I.A.W MT-Propeller issued SI No. 48 latest revision to be eligible for reinstallation on DA 42NG Austro Engine equipped Aircraft.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

Signature *agustino* Lic or Stamp

DA
ROS



Date: 26 July, 2012 S/N: 42.AC022 Reg. #: N236TS
W/O RO-12-058 TACH: 411.6 HRS.

RHE: TAE125-01 S/N: 02-01-0834 TSN: 411.6 Hrs.

The following work carried out :

Thielert Engine M/N: TAE 125-01 S/N: 02-01-0830 TSN:411.6 Hrs.
Removed with harness and shock mounts off RH side 42.AC022 this date in serviceable condition. Compression readings as follows

Cylinder #1 73/80 #2 50/80 #3 60/80 #4 55/80

Glow plugs R & R to carry out compression check, work carried out I.A.W. Thielert Repair manual 02-01 Chapter 37 Issue 4 Rev. 11

ECU removed with engine P/N 02-7610-55003R1 S/N:2436

Performed a FADEC download and sent to Thielert. For further use Installer to comply with any outstanding AWD's or SB's

NOTE: On this Engine #3 Glow Plug Continuity tested open.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES INC. D.O.T. APPROVAL # 161-93

Signature *B. Habbersh* Lic. Or Stamp

DA
ROS

AIR TIME AND



Date: November 20, 2012

COMPLETE

WO # RO-12-058 A/C DA 42 NG S/N: 42.AC022 Reg: N236TS TACH: 411.6 Hrs.

LHE Austro E4-B S/N: E4-B-00371 TSN: 0.0 Hrs.

RHE Austro E4-B S/N: E4-B-00372 TSN: 0.0 Hrs.

LH Prop. Mt-propeller MTV-6-R-C-F/CF187-129 S/N: 06446 TSN: 384.8 Hrs. TSOH: 0.00 Hrs.

RH Prop. Mt-Propeller MTV-6-R-C-F/CF187-129 S/N: 06447 TSN: 411.6 Hrs. TSOH: 0.00 Hrs.

The Following work has been carried out:

Diamond Aircraft Industries GmbH issued Optional Service Bulletin 42-068/1, conversion to variant DA 42 NG WI-OSB42-068 Rev.14 compiled with using Materials kit Appendix A. Rev. 13 and Appendix B. Rev. 10.

Overhauled Propeller MTV-6-R-C-F/CF187-129, S/N 06446 TSOH: 0.00 Hrs. Installed on LHE I.A.W. chapter 61 of DA 42 NG AMM Doc. # 7.02.15 Rev.1. After overhaul & embodiment of Mt-Propeller issued SI No. 48C carried out by Mt-Propeller USA per their W/O # 12-269MT dated August 30, 2012.

Overhauled Propeller MTV-6-R-C-F/CF187-129, S/N 06447 TSOH: 0.00 Hrs. Installed on RHE I.A.W. Chapter 61 of DA 42 NG AMM Doc. # 7.02.15 Rev. 1. After overhaul & embodiment of Mt-Propeller issued SI No. 48C carried out by MT-Propeller USA per their W/O # 12-270MT dated August 30, 2012.

LH prop Accumulator P-893-1 S/N 07A451& RH prop Accumulator P-893-1 S/N 07A447 TSN: 411.6Hrs. removed. New prop Accumulator P-893-1-C S/N 11A139 TSN: 0.00 Hrs. installed on LH. & New Prop Accumulator P-893-1-C S/N: 11A142 TSN: 0.00Hrs. Installed on RH.

LH Thielert Engine TAE 125-01, S/N 02-01-0830 TSN: 411.6 hrs removed and replaced with new "0" time Austro Engine model E4-B, S/N E4-B-00371 I.A.W. WI-OSB42-068 Rev.14 Appendix 2 Rev. 7.

RH Thielert Engine TAE 125-01, S/N 02-01-0834 TSN: 411.6 hrs removed and replaced with new "0" time Austro Engine model E4-B, S/N E4-B-00372 I.A.W. WI-OSB42-068 Rev.14 Appendix 2 Rev. 7.

Both LH & RH newly installed Engines serviced with 7 litres each with Shell Helix 5W30 oil.

LH & RH gearbox serviced with 2 litres each with Shell Spirax GSX 75W80 gearbox oil.

LH & RH cooling systems serviced with a 50/50 mixture of distilled water and Glysantin G48 antifreeze.

LH & RH High pressure fuel pumps checked. New fuel pumps P/N E4A-30-200-000 Rev. 10 Incorporated by Austro Engine. Nacelle Fuel System installation carried out I.A.W. WI-OSB42-068 Rev.14 Appendix 1 Rev.2.

Ground Run up of the engines and fluid leak check performed, found to be satisfactory.

Honeywell KAP140 autopilot system removed. Garmin GFC700 with Yaw Damper installed I.A.W. WI-OSB42-068 Appendix 3. Rev. 4.

Function check of the system carried out and found satisfactory.

SVT activated WAAS equipment installed.

Landing gear installation carried out I.A.W. WI-OSB42-068 Rev.14 Appendix 4. Rev. 4.

New nose landing gear hydraulic actuator P/N D60-9029-03-01_1, S/N 0179 installed.

Landing gear retraction check carried out I.A.W. DA 42NG current issue of AMM chapter 32.

Airspeed indicator model code B864 removed and replaced with new unit model code B884 S/N 207493. Next indication check due at TACH: 2411.6 hrs or November 2016. VSI checked for correct indication.

Altimeter S/N 457532 removed and reinstalled after calibration check carried out by Kitchener Aero avionics per their W/O # K457532 dated October 29, 2012. Next calibration check due October 2014, or at TACH time: 1411.6Hrs.

Pitot static & Transponder Correlation check carried out.

Compass swing carried out.

Radios on: Liquid Compass						
FOR	N	30	60	E	120	150
STEER	360	030	060	090	120	150
FOR	S	210	240	W	300	330
STEER	180	210	238	268	298	330

Radios On: HSI

FOR	N	30	60	E	120	150
STEER	360	030	060	090	120	150
FOR	S	210	240	W	300	330
STEER	181	210	240	269	300	331

Aircraft Re Weighed:

New Empty weight = 1432.5 kg or 3158.1 lbs

New E.W. C of G = 2.376 m or 93.54 in.

New E. W. Moments = 3403.4 kg-m or 295404.3 in-lbs

Max all up Weight = 1900 kg or 4189 lbs

New useful Load = 467.5 kg or 1030.9 lbs

New weight and balance report and equipment list added to section 6 of the Current AFM Doc. # 7.01.15-E Rev. 2 dated

November 2009. All Placards checked for conformance. All flight control surfaces checked for travels.

This DA42 is converted to a DA 42 NG via Diamond Aircraft Industries GmbH issued Optional Service Bulletin OSB42-068/1 and is eligible for TCDS A57CE Rev. 14. MAM 42- 403 and MAM 42-415 as per note 10. Of the TCDS has been incorporated.

Supplemental Data Plate installed. All snags noted during the above described tasks have been rectified and all pertinent details of the work carried out are on file with this work order.

ENGINEERING RECORD

10

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES: DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE NUMBER

The following DAI service bulletins C/W during OSB42-068/1

Austro Engine RSB-E4-003/9 – Engine Software Version updated to VC33_0_05_14 incorporated by Austro Engine.
 Austro Engine MSB-E4-006 – N/A due to Eng. S/N affectivity
 Austro Engine MSB-E4-007/1 – N/A due to Eng. S/N affectivity
 Austro Engine MSB-E4-008/1 – LH and RH Eng. Oil separator hoses N/A due to Eng. S/N affectivity.
 Austro Engine MSB-E4-009/2 – Replacement of High pressure fuel pumps incorporated by Austro Engine.
 Austro Engine MSB-E4-013/1 – N/A due to S/N affectivity of the LH & RH Gearboxes.
 Austro Engine MSB-E4-014/2 – Replacement of the Fuel return line & Banjo fitting. Incorporated by Austro Engine.
 MSB42NG002/8 – Software E4-B (AE300) engine Software version VC33_0_5_14 incorporated by Austro Engine.
 MSB42NG-003/9 – G1000 Software version update C/W. Version 010-00670-06
 MSB 42NG-005/1- Charged Air tube between Turbo charger & Intercooler C/W.
 MSB42NG-007 - Emergency Exit lever Insp: & map light sealant C/W.
 OSB42NG-008 – Installation of coated safety walk C/W.
 MSB42NG-010 – Installation of a protective mesh on coolant and charged air radiator C/W.
 OSB42NG-013 – Cowling with improved cooling performance C/W.
 MSB42NG-014 – Replacement of Passenger door retaining bracket P/N DA4-5200-00-69-SB per Action #2 PCW.
 OSB42NG-015 – Installation of vibration & Cabin noise reduction measures C/W.
 MSB42NG-016/1 – Rudder control System & NLG steering reinforcement C/W. NOTE: Repetitive Inspections Terminated.
 MSB42NG-017/1 – Replacement of seals in MLG Dampers C/W.
 MSB42NG-018/1 – Replacement of turbo connector assy. C/W.
 OSB42NG-019/1 – Installation of fuel Pressure Pulsation damper C/W as part of WI-OSB 42- 068 Rev. 14.
 MSB42NG-022 – Repair of upper center wing skin to spar bond C/W. (FAA AD 2012-17-07 EASA AD 2011-0100)
 MSB42NG-024 -- Removal of the LH aft safety rope and engine mount inspection C/W.
 OSB42NG-025 -- Installation of a heating inlet scoop. C/W as per WI-OSB 42-068 Rev. 14.
 MSB42NG-026 -- Replacement of MLG damper nut C/W.
 MSB42NG-029 – Installation of Fire Protection patches on cowl Nacelles C/W.
 OSB42-068/1 – Conversion from Thielert engines to Austro Engines C/W.
 SI 42NG-039 – AFM updated with Ice Protection System supplement S03 Revision 3.
 MT Propeller SI No.48C - LH and RH propeller modification from "A" flange to "R" flange C/W. by Mt Propeller USA.
 Garmin MSB 0823 Rev.C. - GDU CRS/BARO knob interference check C/W.
 Garmin MSB 0533 Rev. B GRS77 IGRF Earth's Magnetic field C/W.
 AD2005-01-19 – N/A as Garmin GTX33 software version is at 5.01.
 AD 2008-16-20 Replacement of aileron bell crank rod ends PCW.
 AD 2010-11-09 - Proportional Pressure reducing valve N/A to Austro Engines.
 AD 2011-10-13 – Passenger door retaining bracket with improved version P/N DA4-5200-00-69_1 PCW. as per MSB42NG-014.
 AD 2011-11-07 – MLG joint inspection & replacement N/A as P/N D64-3217-23-0x is installed.
 AD 2011-18-19- LH & RH High Pressure Pumps fuel oscillation check. N/A as New fuel pumps per MSB-E4-009/2 are installed.
 AD 2012-17-07 – Repair of upper center wing skin to spar bond C/W. (Ref. MSB42NG-022).

AWDS checked through Bi-Weekly Supplement 2012- 22

The maintenance described above has been performed in accordance with the applicable standards of Airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

This aircraft is released subject to the completion of a satisfactory test flight for the evaluation of flight, engine and avionics performance.

Signature:

Lic or Stamp:



Date: November 20, 2012

WO # RO-12-058 A/C DA 42NG S/N: 42.AC022 Reg: N236TS TACH: 411.6 hrs.

LHE Austro E4-B S/N: E4-B-00371 TSN: 0.00 Hrs.

RHE Austro E4-B S/N: E4-B-00372 TSN: 0.00 Hrs.

LH Prop. Mt-Propeller MTV-6-R-C-F/187-129 S/N: 06446 TSN: 384.8Hrs. TSOH: 0.00 Hrs.

RH Prop. Mt-propeller MTV-6-R-C-F/187-129 S/N: 06447 TSN: 411.6Hrs. TSOH: 0.00 Hrs.

COMPLETE

The Following work has been carried out:

100 hr inspection carried out I.A.W. DA42NG AMM Doc. 7.02.15 Rev. 1 chapter 04-00-00, & chapter 05-00-00. Annual performance check on ME406 ELT carried out. Next performance check due Nov. 2013. ELT battery due for replacement Jan.2018. Emergency battery pack replaced with new. Next replacement due Nov.2014. New ECU backup batteries installed. Next replacement due Nov. 2013. Autopilot mechanical check carried out. Next check due Nov. 2013 or at TACH: 911.6 hrs. Altimeter S/N 457532 removed and reinstalled after recertification carried out by Kitchener Aero WO # K48781. Next due Oct. 2014, or at TACH:1411.6 Hrs. Pitot static and transponder correlation checks carried out. Next check due Nov. 2014 or at 1411.6 Hrs. Electrical Bonding and static discharging system check carried out. Next check due at Tach time 1411.6.6 hrs or Nov. 2016. Main Battery P/N RG24-15M S/N 40145372 removed. New Battery S/N 40521007 installed. LH and RH fuel filter elements replaced with new. Brake fluid drained and replenished with new Aeroshell fluid 4. Brake system bled. Next fluid replacement due Nov. 2015. Hydraulic fluid in landing gear dampers replaced. Next fluid change due Nov.. 2014 or 2411.6 hrs. Hydraulic system fluid replaced Next fluid change due Nov. 2014 or TACH TIME: 2411.6 Hrs. LH MLG Actuator S/N 0372 & RH MLG Actuator S/N1449 serviced with new seal kits. NLG Steering Cardan joint replaced with a new unit P/N D60-3223-19-00 I.A.W. Chapters 32-20 & 32-50 of the current issue of DA42NG AMM. All wheel bearings cleaned, inspected and serviced with fresh Mobil Aviation SHC100 grease. LH MLG down lock arm replaced with new. MLG Landing Gear retraction check carried out including check of all audible warnings and determined to be satisfactory. Airspeed indicator & VSI checked for correct indication. Next due Oct. 2016 or 2411.6 Hrs. Fuel hoses interconnecting the individual fuel tank chambers replaced with new. Next replacement due Nov. 2020. LH inboard fuel tank long fuel quantity probe P/N D60-2817-13-00 S/N 92107-016 removed & replaced with the new improved version fuel probe P/N D60-2817-13-00_1 S/N 226734-016. Also LH outboard fuel tank short fuel quantity probe P/N D60-2817-14-00 S/N 89668-010 removed and replaced with the new improved version fuel probe P/N D60-2817-14-00_1 S/N 227092-016. **NOTE: The RH fuel tanks fuel quantity probes found to be the improved version installed by the owner's maintenance facility.** Both LH and RH newly installed engines serviced with 7 liters each Shell Helix 5W30 oil. LH and RH gearbox serviced with 2 liters each Shell Spirax GSX 75W80 oil. Engine cooling system serviced with a 50/50 mixture of distilled water and glycol Glysantin G48. Next coolant change due Nov. 2014 or TACH:1011.6 Hrs. Function check of the TKS system carried out and TKS system deemed serviceable. Wings inspected as per AMM chapter 05 inspection sheets and wings reinstalled. Rudder and stab removed inspected and reinstalled I.A.W. chapter 27 of the DA 42NG AMM. All rudder cables replaced with new. Hence these cables will be due for replacement in November 2017 or at Tach reading of 3411.6 Hrs. Flight control surfaces travel checks carried out I.A.W. chapter 6 of the DA42NG AMM. Independent check of the engine and flight controls affected by the described work carried out. Hand held Fire Extinguisher Amerex A620 S/N XV-86347 Annual weight check and pressure check carried out. Weight recorded as 2 lbs. 4 oz. Garmin Synthetic Vision SVT activated. All Limitation placards checked for conformance I.A.W. current issue of the AFM Section 2.15. Garmin G1000 Data base update carried out. **Safe taxi, Obstacle, & Airport directory next update Due Jan. 10, 2013 Navigation and Flight Charts next update Due December 13, 2012.**

Aircraft Re weighed and AFM section 6 updated with revised weight and Balance and equipment list.

New Empty Weight = 1432.5 kg. OR 3158.1 lbs.

New EW C of G = 2.376 m. OR 93.54 ins.

New EW Moments = 3403.4 kgm. OR 295404.3 in.lbs.

Max. Gross Weight = 1900 kg. OR 4189.0 lbs.

New Useful Load = 467.5 kg. OR 1030.9 lbs.

All snags notated during the above described tasks have been rectified and all pertinent details of the work carried out are on file with this work order.

Ground run up of the engines, for fluid leaks performed and determined to be satisfactory.

Magnetic compass swing carried out.

Radio's on: Liquid Compass

FOR	N	30	60	E	120	150
STEER	360	030	060	090	120	150
FOR	S	210	240	W	300	330
STEER	180	210	238	268	299	330

Following AWD's and SB's checked and complied with as applicable:

Austro Engine MSB-E4-003/9 – Engine Software Version updated to VC33_0_05_14 Incorporated by Austro Engine.

Austro Engine MSB-E4-006 /1- N/A due to Eng. S/N affectivity

Austro Engine MSB-E4-007/1 – N/A due to Eng. S/N affectivity

Austro Engine MSB-E4-008/1 – LH and RH Eng. Oil separator hoses N/A due to Eng. S/N affectivity.

Austro Engine MSB-E4-009/2 – Replacement of High pressure fuel pumps incorporated by Austro Engine.

Austro Engine MSB-E4-013/1/Gear Box oil Insp. N/A due to S/N affectivity of the LH & RH Gearboxes.

Austro Engine MSB-E4-014/2 – Replacement of the fuel line & Banjo fitting. Incorporated by Austro Engine.

MSB42NG002/8 – Software E4-B (AE300) engine C/W. Software version VC33_0_5_14

MSB42NG-003/9 – G1000 Software version update C/W. Version 010-00670-06.

MSB 42NG-005/1 - Charged Air tube between Turbo charger & Intercooler C/W.

MSB42NG-007 - Emergency Exit lever Insp. & map light sealant C/W.

MSB42NG-008 – Installation of coated safety walk C/W.

MSB42NG-010 – Installation of a protective mesh on coolant and charged air radiator C/W.

OSB42NG-013 – Cowling with improved cooling performance C/W.

MSB42NG-014 – Replacement of Passenger door retaining bracket P/N DA4-5200-00-69_1 per Action #2 PCW.

OSB42NG-015 – Installation of vibration & cabin noise reduction measures C/W.

MSB42NG-016/1 – Rudder control System & NLG steering reinforcement C/W. **NOTE: Repetitive inspections terminated.**

RSB42NG-017/1 – EASA AD 2012-0174 Replacement of seals in MLG Dampers C/W.

ENGINEERING RECORD

11

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE NUMBER

MSB42NG-018/1 - Replacement of turbo connector Assy. C/W
 OSB42NG-019 - Installation of fuel Pressure Pulsation damper C/W as per WI OSB 42NG-068 Rev.14
 MSB42NG-022 - Repair of upper center wing skin to spar bond C/W. (FAA AD 2012-17-07. EASA AD2011-0100)
 MSB42NG-024 - Removal of the LH safety ropes on both Engines C/W.
 OSB42NG-025 - Installation of a heating inlet scoop C/W as per WI OSB42-068 Rev. 14.
 MSB42NG-026 - Replacement of MLG damper nut C/W.
 OSB42NG-029 - Installation of Fire protection Patches on cowls nacelles C/W.
 RSB42NG-030 - Replacement of Air Conditioning system N/A as A/C not AC equipped.
 OSB42NG-032 - Retrofit of Oxygen system N/A. Optional Only.
 OSB42-068/1 - Conversion from Thielert Engines to Austro Engines C/W.
 RSB42-025 - Improved Fuel probes installation RH probes found PCW LH probes replaced with improved version.
 RSB42-029 - Additional position pins for canopy C/W.
 RSB-42-072/2 - LH & RH Engines heat detectors P/N X2003-2 Sealed for water protection C/W as part of OSB42-068/1 Rev. 14.
 SA 42NG-039 - Induction system - Abnormal/Emergency Procedures. AFM updated with Supplement SO3 Rev. 3.
 MT Propeller SI48C - LH and RH propeller modification from "A" flange to "R" flange C/W by Mt-Propeller USA.
 Garmin MSB 0823 Rev.C. - GDU CRS/BARO knob interference check C/W.
 Garmin MSB 0533 Rev. B GRS77 IGRF Earth's Magnetic field C/W.
 AD2005-01-19 - N/A as Garmin GTX33 software version is at 6.11.
 AD 2008-16-20 replacement of aileron bell crank rod ends PCW.
 AD 2010-11-09 - Proportional Pressure reducing Valve N/A to Austro Engines.
 AD 2011-10-13 - Passenger door retaining bracket with improved version P/N DA4-5200-00-69_1 C/W as per MSB42NG-014.
 AD2011-11-07 - MLG joint inspection & replacement N/A as P/N D64-3217-23-0x is installed.
 AD2011-18-19 - LH & RH High Pressure Pumps fuel oscillation check. N/A New fuel pumps as per MSB-E4-009/2 are installed.
 AD2012-17-07 - Repair of upper center wing skin to spar bond C/W.

AWDS checked through Bi-Weekly Supplement 2012- 22

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Signature: Mark Steele Lic or Stamp: 

I have carried out an independent inspection of the Flight controls/Powerplant controls affected by the work accomplished.

Signature: B. Rafferty Lic or Stamp: 

This aircraft is released subject to the completion of a satisfactory test flight for the evaluation of flight, engine and avionics performance.

Signature: Mark Steele Lic or Stamp: 



Date: November 20, 2012

WO # RO-12-058 A/C DA 42NG S/N: 42.AC022 Reg: N236TS TACH: 411.6 Hrs.

"I certify that the Static Pressure system has been inspected and tested in accordance with Chapter 571.10, Appendix B Paragraph (a) 4(1) of the CARs, FAR 91.411, FAR 43 appendix E and Chapter 12 section 4 Paragraph 12-57 of the AC 43.13-1B.2A."

Transponder correlation requirements completed I.A.W. 571 appendix F, 571.10, Appendix B paragraph (a)4(1) of the CARs, FAR 91.411, FAR 91.413, FAR 43 appendix E & F, and chapter 12, section 4, paragraph 12-57 of the AC43.13-1B.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

Signature: Mark Steele Lic or Stamp: 

AIR TIME AND

WO # RQ-12-058 A/C DA 42 NG S/N: 42.AC022 Reg: N236TS TACH: 413.6 Hrs.

WFO # KU-12-038 A/C DA 42 NC SN: 42A0022 R
LHE Austro E4-B S/N: E4-B-00371 TSN: 2.0 Hrs.

RHE Austro E4-B S/N: E4-B-00372 TSN: 2.0 Hrs.

1 H Prop. Mt-propeller MTV-6-R-C-F/CE187-129 S/N: 06446 TSN: 386.8 Hrs. TSOH: 2.00 Hrs.

ER Prop. Mt-propeller MTV-6-B-C-E/CE187-129 S/N: 06447 TSN: 413.6 Hrs. TSOH: 2.00 Hrs.

The Following Pilot reported snags rectified after the 1st. Maintenance Check Flight :

LH wing inboard TKS panel cleaned off with rag and TKS fluid to obtain better fluid coverage during TKS operation.

Air hose under the co pilot's seat re connected to obtain air circulation through the air vents.

RH MLG squat switch adjusted and stall heat function checked and determined to operate satisfactorily.

LH flap & LH aileron short rods adjusted by moving rod ends $\frac{1}{2}$ turn out and flap adjusted to obtain 5lbs. of Pre load.

Inner seal on the Canopy aft LH corner adjusted to rid of slight draft in that area experienced during flight.

I have carried out an Independent inspection of the flight controls affected by the above described work.

Signature: Lic. Or Stamp:

The maintenance described above has been carried out in accordance with the applicable standards of airworthiness.

Signature: *John W. Meek* Lic. Or Stamp: RO6

 Diamond

Date: November 23, 2012

The following table summarizes the results of the study.

The Following work has been carried out.
New Tension card installed. Ohm's law indication was removed.

New Terrain card installed. Obstacle indication now normal.
LH wing TKS Inboard Panel purged system off air. Function checked OK.

LH Wing LKS Inboard Panel purged system off air. Function checked OK. Faulty Lift detector P/N C-99701-1 S/N: 319 removed. New Lift Detector

Faulty Lift detector P/N C-99701-1 S/N: 319 removed. New Lift Detector P/N C-99701 S/N: 150492-06 installed and function check carried out.

The maintenance described above has been performed in

DIAMOND AIRCRAFT INDUSTRIES AGILE 600

Signature Date or Stamp

DA
ROS

MODEL	DA 42	NORTH STAR AVIATION	DATE	4/5/13
SERIAL #	42.AC022	3030 AIRPORT ROAD		
REG #	N236TS	MANKATO, MN 56001	TT	470.1
Hobbs	N/A	FAA CRS NUTR521L		
Tach	470.1	LOGBOOK INSERT	W/O	4929
Removed left low pressure fuel pump assembly and installed new fuel filter assembly P/N D64-2810-00-01_1 revision B using new aluminum seals P/N DIN7603-A14X20X1.5AL on aft low pressure fuel pump reinstalled low pressure fuel pump assembly all work done referencing maintenance manual chapter 28-20-00 leak check good. The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station. DATE <u>4/5/13</u>				
SIGNED <u>Jon Wieland</u> Jon Wieland for North Star Aviation FAA CRS NUTR521L				

LICENCE NUMBER

AIR TIME AND

ENGINEERING RECORD

NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE



Date: November 23, 2012
N236TS TTAE: 414.4 Hrs

The Following work has been carried out.
The RH Wing outboard TKS Panel purged system off air to get full
Wetness during TKS system check.
LH flap short rod adjusted 1/2 turn shorter & flapper load shim added.
I HAVE CARRIED OUT AN INDEPENDENT CHECK OF THE LH FLAP
AFFECTED BY THE ABOVE DESCRIBED TASK P4

Signature _____ Lic or Stamp _____

DA
R017

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

DA
ROS

Signature John D. French Lic or Stamp



NOV 23 2012

Date:

I have flown this aircraft in accordance with FAR 91.407, and determined that the Flight characteristics, Engine performance, and Avionics to be in conformance with the standards of the type.

Signature

Licence



Date: November 23, 2012

WO#: RO-12-058 S/N: 40.AC022 Req #: N236TS TTAF: 414.7 Hrs

The Following work has been carried out.
Right engine coolant pressure relief valve P/N X11-0014-00-00.00
Replaced with new valve same P/N S/N 0350
RHE fwd coolant hose clamps to cooler assy retorqued to spec.
R H engine coolant level topped and system pressure tested.
No leaks found
I.A.W. DA42NG M.M. Chapter 75-00-00

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

DA
R012

CARRIED FORWARD

ENGINEERING RECORD

13

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE NUMBER



Date: November 23, 2012

WO#: RO-12-058 S/N: 40.AC022 Reg #: N236TS TTAF: 414.7 Hrs

The Following work has been carried out.

Slight cowling bump damage to trailing edge of blade # 2 R/H Propeller
 Minor repair carried out using 5 min epoxy. I.A.W. MT-Propeller Manual
 E-124 pg 25

The maintenance described above has been performed in
 accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

Signature

Lic or Stamp

MODEL	DA 42	NORTH STAR AVIATION	DATE	6/20/13
SERIAL #	42.AC022	3030 AIRPORT ROAD		
REG #	N236TS	MANKATO, MN 56001	TT	483.8
Hobbs	N/A	FAA CRS NUTR521L		
Tach	483.8	LOGBOOK INSERT	W/O	5013

Removed left wheel disassembled cleaned and inspected no defects noted. Reassembled wheel using new tube P/N 097-500-0 and new tire P/N 156E66-4 S/N 22767662 reinstalled wheel on aircraft and cotter pinned axle nut. Removed Right wheel disassembled cleaned and inspected no defects noted. Reassembled wheel using new tube P/N 097-500-0 and new tire P/N 156E66-4 S/N 22737572 reinstalled wheel on aircraft and cotter pinned axle nut. Installed new brake linings P/N 066-10500 on left and right brakes. Installed new pilots storm window latch P/N 301.25.4110.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 6/20/13

SIGNED

Jon Wieland for North Star Aviation FAA CRS NUTR521L

COMPILED WITH AD 39-17397
 DOCKET NO FAD-2013-0247
 IDENT FILER 2013-CE-001-AD.

DEEPINDER SINGH -
 PPLN 3586751
 DT → 10 SEPT '13

COMPILED WITH AD 2013-06-02 by.
 DOWNLOADING, PRINTING AND INSERTING INTO
 AFM THE FOLLOWING DIAMOND DOCUMENTS.

DOC 7.01.15-E DT NOV 20, 2012, DOC 7.01.15-E DT NOV 30, 2013
 Doc 7.01.15-E DT NOV 20, 2012, Doc 7.01.15-E DT NOV 30, 2013

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD	
	HRS.	MIN.	HRS.	MIN.	NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETION	
BROUGHT FORWARD						
MODEL	DA 42	NORTH STAR AVIATION			DATE	10/11/2013
SERIAL #	42.AC022	3030 AIRPORT ROAD				
REG #	N236TS	MANKATO, MN 56001			TT	564.6
Hobbs	N/A	FAA CRS NUTR521L				
Tach	564.6	LOGBOOK INSERT			W/O	5167
Removed TKS level sender p/n D60-3013-25-00 and installed new sender p/n D60-3013-25-00 s/n CS0705505-10000. Function and leak check ok.						
The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.						
DATE 10/11/2013						
SIGNED <i>Jason Eberle</i> Jason Eberle for North Star Aviation FAA CRS NUTR521L						
MODEL	DA42NG	NORTH STAR AVIATION			DATE	11/29/13
SERIAL #	42.AC022	3030 AIRPORT ROAD			Tach.	565.1
REG #	N236TS	MANKATO, MN 56001			TT	565.1
		CRS NUTR521L				
		LOGBOOK INSERT			W/O	5204
<ol style="list-style-type: none"> Completed an annual inspection referencing the checklist contained in the DA 42NG maintenance manual. Inspected ELT in accordance with FAR 91.207 par (d) battery expiration date of Jan. 2018 Performed operational check of TKS system. Lubricated aircraft and landing gear referencing maintenance manual chapter 12-20-00 Completed capacity check of aircraft battery referencing Concorde maintenance manual document No. 5-0171 Rev. M Removed cleaned and reinstalled TKS fluid strainer. Removed emergency battery and installed new battery P/N D60-2560-91-00. Next replacement due Nov. 2015 Removed and installed 4 new ECU back up batteries P/N LC-R127R2P next replacement due Nov. 2014 Serviced landing gear accumulator to 1150 psi with nitrogen. Completed mechanical check of autopilot referencing maintenance manual chapter 22-10-00 Check next due Nov. 2014 Removed left and right engine air filters and installed new air filters P/N RU-1620 Filters next due for replacement at 765.1 ACTT. AD 2013-19-11 is N/A by serial number of nose gear actuator. 						
I certify that this Aircraft has been inspected in accordance with an annual inspection and was determined to be in Airworthy condition.						
The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.						
DATE 11/29/13						
SIGNED <i>Jon Wieland</i> Jon Wieland for North Star Aviation FAA CRS NUTR521L						
MODEL	DA 42	NORTH STAR AVIATION			DATE	8/4/14
SERIAL #	42.AC022	3030 AIRPORT ROAD				
REG #	N236TS	MANKATO, MN 56001			TT	702.9
Hobbs	N/A	FAA CRS NUTR521L				
Tach	702.9	LOGBOOK INSERT			W/O	246
Removed left wheel disassembled cleaned and inspected no defects noted. Reassembled wheel using new tube P/N 097-500-0 and overhauled tire P/N 156E66-4 S/N 80750237R1 by Aero Wheel and Brake Service Corp under W/O # 147309 reinstalled wheel on aircraft and cotter pinned axle nut.						
The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.						
DATE 8/4/14						
SIGNED <i>Jon Wieland</i> Jon Wieland for North Star Aviation FAA CRS NUTR521L						

CARRIED FORWARD

ENGINEERING RECORD

MODEL	DA42NG	NORTH STAR AVIATION		DATE	11/14/14
SERIAL #	42.AC022	3030 AIRPORT ROAD		A/C TT	696.2
REG #	N236TS	MANKATO, MN 56001			
Tach.	696.2	CRS NUTR521L			
		LOGBOOK INSERT		W/O	186
<p>Removed left and right low pressure pump assemblies and removed pre filters and installed new pre filters P/N D64-2810-00-03_1 revision B using new seals P/N DIN7603-A14X20X1,5AL reinstalled left and right low pressure pump assemblies all work done referencing maintenance manual chapter 28-20-00 leak check good. Removed left and right fuel filler assembly and installed new seal P/N DIN3771-128X5,3 and resealed left and right fuel fill assembly to wing using PL32-40ZMED disassembled left and right fuel caps and reassembled using overhaul kit M00150 all work done referencing maintenance manual chapter 28-10-00. Installed new left engine fuel pulsating damper P/N D44-7306-30-00 leak check good. Complied with Diamond service bulletin MSB42NG-002/13 by updating left and right engine EECU software to version VC33-X-05-18 referencing AE300 maintenance manual chapter 76-00-11 completed ground run after update of left and right engine (referencing AE#)) maintenance manual chapter 85-10-20. Removed left engine coolant radiator P/N D64-7520-00-00 S/N 117R-G11 and installed new radiator P/N D64-7520-00-00 S/N RC1403391 referencing maintenance manual chapter 75-00-00 serviced left engine coolant system and bleed leak check of system good. Removed left engine propeller governor P/N P-877-16 S/N 11G576-F/D and installed modified governor P/N P-877-16 S/N 11G567-F/E by MT-propeller under W/O # 2010008592 referencing maintenance manual chapter 61-20-00 run up and leak check good.</p>					
<p>The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.</p>					
<p>DATE <u>11/14/14</u> SIGNED <u>Jon Wieland</u> Jon Wieland for North Star Aviation FAA CRS NUTR521L</p>					

I certify that the altimeter, static system, transponder, and altitude reporter test required by FARs 91.411, 91.413 & 91.217 have been performed and found to be within the limits of FAR 43 appendices E & F and AC 43.6a TESTED TO 20,000 FT.

Altimeter Model GBC 741A #1 S/N 47806953 Model 6934FD-3 #2 S/N 457532

Altitude Model GDC 74A #1 S/N 47306753 Model #2 S/N

SIGNED Jason Shultz

North Star Aviation, Inc. Mankato, MN 56001
FAA CRS# NUTR521L W/O# 420

11/20/2015
TT 758.4

MODEL	DA42NG	NORTH STAR AVIATION	DATE	1/23/15
SERIAL #	42.AC022	3030 AIRPORT ROAD	A/C TT	758.4
REG #	N236TS	MANKATO, MN 56001		
Tach.	758.4	CRS NUTR521L		
		LOGBOOK INSERT	W/O	413

Removed left engine model E4B S/N E4-B-00371 and installed overhauled engine E4B S/N E4-B-00115 with an engine total time of 1497.0 by Diamond Aircraft under W/O # ESO140045 referencing maintenance manual chapter 71-00-00 see engine log for details. Installed new left engine coolant level sensor P/N D64-7526-00-02 S/N RC1502610 using new sealing ring P/N DIN7603-22-27-CU serviced coolant level all work done referencing maintenance manual chapter 75-00-00 leak check good. Installed new right engine glow plug control bracket P/N E4A-94-100-501. Removed lift detector and installed new lift detector P/N C-99701-1 S/N RC1502808 referencing maintenance manual chapter 31-40-00 operational check good.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 1/23/15 SIGNED Jon Wierand
Jon Wierand for North Star Aviation FAA CRS NUTR521L

MODEL	DA42NG	NORTH STAR AVIATION	DATE	1/23/15
SERIAL #	42.AC022	3030 AIRPORT ROAD	Tach.	758.4
REG #	N236TS	MANKATO, MN 56001	TT	758.4
		CRS NUTR521L		
		LOGBOOK INSERT	W/O	422

D.

BRC
FOR

- Completed an annual inspection referencing the checklist contained in the DA 42NG maintenance manual.
- Inspected ELT in accordance with FAR 91.207 par (d) battery expiration date of Jan. 2018
- Performed operational check of TKS system.
- Lubricated aircraft and landing gear referencing maintenance manual chapter 12-20-00
- Completed capacity check of aircraft battery referencing Concorde maintenance manual document No. 5-0171 Rev. M
- Removed cleaned and reinstalled TKS fluid strainer.
- Removed and installed 4 new ECU back up batteries P/N LC-R127R2P next replacement due Jan. 2016
- Serviced landing gear accumulator to 1150 psi with nitrogen referencing maintenance manual chapter 29-10-00.
- Completed mechanical check of autopilot referencing maintenance manual chapter 22-10-00 Check next due Jan. 2016
- Removed left and right engine air filters and installed new air filters P/N RU-1620 Filters next due for replacement at 958.4 ACTT.
- Installed new left alternator switch P/N K2ACHAAAAA referencing maintenance manual chapter 24-60-00 operational check good.
- Complied with AD 2014-04-04 by updating G1000 software to manifest listed in Diamond service bulletin MSB42NG-003/16 no further action required.

I certify that this Aircraft has been inspected in accordance with an annual inspection and was determined to be in Airworthy condition.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 1/23/15

SIGNED

Jon Wieland for North Star Aviation FAA CRS NUTR521L

MODEL	DA42NG	NORTH STAR AVIATION	DATE	1/29/16
SERIAL #	42.AC022	3030 AIRPORT ROAD	A/C TT	895.6
REG #	N236TS	MANKATO, MN 56001		
Tach.	895.6	CRS NUTR521L		
		LOGBOOK INSERT	W/O	862

Removed aircraft battery RG24-15M S/N 40145372 and installed new aircraft battery RG24-15M S/N 40774298 referencing maintenance manual chapter 24-31-00. Removed right alternator switch and installed new switch P/N K2ACHAAAAA referencing maintenance manual chapter 24-60-00 operational check good.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 1/29/16

SIGNED

Jon Wieland for North Star Aviation FAA CRS NUTR521L

MODEL	DA42NG	NORTH STAR AVIATION	DATE	2/26/16
SERIAL #	42.AC022	3030 AIRPORT ROAD	Tach.	901.4
REG #	N236TS	MANKATO, MN 56001	TT	901.4
		CRS NUTR521L		
		LOGBOOK INSERT	W/O	882

- Completed an annual inspection referencing the checklist contained in the DA 42NG maintenance manual.
- Inspected ELT in accordance with FAR 91.207 par (d) battery expiration date of Jan. 2018
- Performed operational check of TKS system.
- Lubricated aircraft and landing gear referencing maintenance manual chapter 12-20-00
- Removed cleaned and reinstalled TKS fluid strainer.
- Removed and installed 4 new ECU back up batteries P/N LC-R127R2P next replacement due Feb. 2017
- Installed new Emergency Battery P/N D60-2560-91-00 next replacement due Feb. 2018.
- Serviced landing gear accumulator to 1150 psi with nitrogen referencing maintenance manual chapter 29-10-00.
- Completed mechanical check of autopilot referencing maintenance manual chapter 22-10-00 Check next due Jan. 2016
- Removed left and right engine air filters and installed new air filters P/N RU-1620 Filters next due for replacement at 1101.4 ACTT.
- Removed windshield #2 de-ice pump and installed new pump P/N D60-9030-13-05 S/N RC1602672 referencing maintenance manual chapter 30-00-00 operational check good.
- Removed nose wheel disassembled cleaned and inspected no defects noted reassembled using new tube P/N 092-308-0 and new tire P/N 505C01-2 reinstalled wheel.
- Removed right wheel disassembled cleaned and inspected no defects noted reassembled wheel using new tube P/N 097-500-0 and new tire P/N 156E66-4 reinstalled wheel.
- Installed new left and right brake linings P/N 066-10500.

I certify that this Aircraft has been inspected in accordance with an annual inspection and was determined to be in Airworthy condition.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 2/26/16

SIGNED

Jon Wieland for North Star Aviation FAA CRS NUTR521L

CARRIED FORWARD

ENGINEERING RECORD

15

INSPECTION, REPAIRS & REPLACEMENT
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

2-16-2017

Tach 1030.6

I certify that the altimeter, static system, transponder, and altitude reporter test required by FARs 91.411, 91.413 & 91.217 have been performed and found to be within the limits of FAR 43 appendices E & F and AC 43.6a TESTED TO 20,000Altimeter Model GDC74A #1 S/N 4760692 Model 5934PD3 #2 S/N 457532Transponder Model ATX33 #1 S/N 8910331 Model 1 #2 S/N 1Altitude Model GDC74A #1 S/N 4760692 Model 1 #2 S/N 1SIGNED Donald WielandNorth Star Aviation, Inc. Mankato, MN 56001
FAA CRS# NUTR521L W/O# 1310

MODEL	DA42NG	NORTH STAR AVIATION	DATE	3/16/17
SERIAL #	42.AC022	3030 AIRPORT ROAD	Tach.	1030.6
REG #	N236TS	MANKATO, MN 56001	TT	1030.6
		CRS NUTR521L		
		LOGBOOK INSERT	W/O	1292

- Completed an annual inspection referencing the checklist contained in the DA 42NG maintenance manual.
- Completed 1000-hour inspection referencing the checklist contained in the DA 42NG maintenance manual.
- Completed 1000-hour bonding check referencing maintenance manual chapter 51-80-00.
- Inspected ELT in accordance with FAR 91.207 par (d) installed new battery P/N 455-0012 with an expiration date of June 2021.
- Performed operational check of TKS system.
- Lubricated aircraft and landing gear referencing maintenance manual chapter 12-20-00.
- Removed and installed 4 new ECU back up batteries P/N LC-R127R2P next replacement due March 2018.
- Serviced landing gear accumulator to 1150 psi with nitrogen referencing maintenance manual chapter 29-10-00.
- Removed left and right engine air filters and installed new air filters P/N RU-1620 Filters next due for replacement at 1230.6 ACTT.
- Removed nose wheel removed wheel bearings and races and installed new races P/N 214-00300 and new bearings P/N 08125-20629 reinstalled wheel.
- Repaired right ice light connector.
- Removed left horizontal stabilizer static wick and installed new static wick P/N 16630 referencing maintenance manual chapter 23-60-00.
- Installed new right propeller TKS nozzle P/N D60-9030-66-01 referencing maintenance manual chapter 30-00-00.
- Removed cabin fire extinguisher and installed new fire extinguisher P/N A344T.
- Removed Tanis heater element and installed new element P/N TTP2639 and installed new fuse P/N TU02848 operational check good.

I certify that this Aircraft has been inspected in accordance with an annual inspection and was determined to be in Airworthy condition.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 3/16/17SIGNED Jon Wieland

Jon Wieland for North Star Aviation FAA CRS NUTR521L

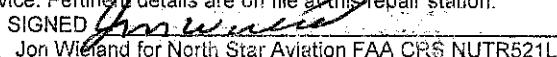
MODEL	DA42NG	NORTH STAR AVIATION	DATE	5/25/18
SERIAL #	42.AC022	3030 AIRPORT ROAD	Tach.	1192.6
REG #	N236TS	MANKATO, MN 56001	TT	1192.6
		CRS NUTR521L		
		LOGBOOK INSERT	W/O	1853

- Completed an annual inspection referencing the checklist contained in the DA 42NG maintenance manual.
- Inspected ELT in accordance with FAR 91.207 par (d) battery expiration date June 2021.
- Performed operational check of TKS system.
- Cleaned and repacked wheel bearings.
- Lubricated aircraft and landing gear referencing maintenance manual chapter 12-20-00.
- Removed and installed 4 new ECU back up batteries P/N LC-R127R2P next replacement due May 2019.
- Removed and installed new emergency battery P/N D60-2560-91-00. Next replacement due May 2020.
- Serviced landing gear accumulator to 1150 psi with nitrogen referencing maintenance manual chapter 29-10-00.
- Removed left and right engine air filters and installed new air filters P/N RU-1620 Filters next due for replacement at 1392.6 ACTT.
- Removed left and right brake calipers and installed new O-rings P/N MS28775-222 and bleed brakes.
- Installed new left and right brake linings P/N 066-10500 completed brake lining conditioning.
- Installed new rudder trim coupler P/N D60-2728-00-51 referencing maintenance manual chapter 27-21-00.
- Installed new left step safety walk P/N D60-1127-10-53 and right step safety walk P/N D60-1127-10-54.
- Installed new canopy lock P/N 3802-0022 referencing maintenance manual chapter 52-10-00.
- Removed and installed new left and right fuel filters P/N WK724_3 referencing DA42NG maintenance manual chapter 28-20-00 leak check good.
- Complied with AD 2017-18-10 by installing new flap bellcrank P/N D60-2757-11-00_1 and 2 bushings P/N BU2-10-06-0065-C in accordance with Diamond Aircraft mandatory service bulletin MSB42NG-066 and work instructions WI - MSB42NG-066. Installation of improved bellcrank is terminating action for repetitive inspection requirements.

I certify that this Aircraft has been inspected in accordance with an annual inspection and was determined to be in Airworthy condition.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 5/25/18

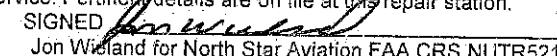
SIGNED 
Jon Wieland for North Star Aviation FAA CRS NUTR521L

MODEL	DA42NG	NORTH STAR AVIATION	DATE	6/14/18
SERIAL #	42.AC022	3030 AIRPORT ROAD	Tach.	1206.0
REG #	N236TS	MANKATO, MN 56001	TT	1206.0
		CRS NUTR521L		
		LOGBOOK INSERT	W/O	1891

Removed left wheel disassembled cleaned and inspected no defects noted. Reassembled wheel using new tube P/N 097-500-0 and new tire P/N 156E66-4 S/N 80432097 reinstalled wheel and installed axle nut bolt. Removed right wheel disassembled cleaned and inspected no defects noted. Reassembled wheel using new tube P/N 097-500-0 and new tire P/N 156E66-4 S/N 80432096 reinstalled wheel and installed axle nut bolt.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 6/14/18

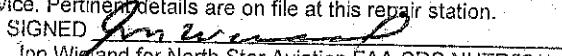
SIGNED 
Jon Wieland for North Star Aviation FAA CRS NUTR521L

MODEL	DA 42	NORTH STAR AVIATION	DATE	10/22/18
SERIAL #	42.AC022	3030 AIRPORT ROAD		
REG #	N236TS	MANKATO, MN 56001		
		FAA CRS NUTR521L		
		LOGBOOK INSERT	W/O	2031

Removed left wheel disassembled cleaned and inspected no defects noted. Reassembled wheel using new tube P/N 302-246-401 and new tire P/N 156E66-4 S/N 82522069. Reinstalled wheel on aircraft and cotter pinned axle nut. Installed new right wing tip flash tube P/N 02-0250276-00 operational check good. Installed new pilots MAP light bulb P/N OSR2845 operational check good.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 10/22/18

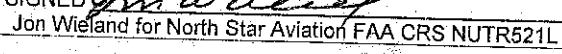
SIGNED 
Jon Wieland for North Star Aviation FAA CRS NUTR521L

MODEL	DA42NG	NORTH STAR AVIATION	DATE	2/4/19
SERIAL #	42.AC022	3030 AIRPORT ROAD	A/C TT	1309.8
REG #	N236TS	MANKATO, MN 56001		
Tach.	1309.8	CRS NUTR521L		
		LOGBOOK INSERT	W/O	2150

Installed new instrument light potentiometer P/N KKS3U5021R24 referencing maintenance manual chapter 33-10-00 operational check good.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 2/4/19

SIGNED 
Jon Wieland for North Star Aviation FAA CRS NUTR521L

MODEL	DA42NG	NORTH STAR AVIATION	DATE	7/5/19
SERIAL #	42.AC022	3030 AIRPORT ROAD	Tach.	1337.9
REG #	N236TS	MANKATO, MN 56001	TT	1337.9
		CRS NUTR521L		
		LOGBOOK INSERT	W/O	2320

ENTRI

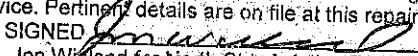
- Completed an annual inspection referencing the checklist contained in the DA 42NG maintenance manual.
- Inspected ELT in accordance with FAR 91.207 par (d) battery expiration date June 2021.
- Performed operational check of TKS system.
- Cleaned and repacked wheel bearings.
- Lubricated aircraft and landing gear referencing maintenance manual chapter 12-20-00.
- Removed and installed 4 new ECU back up batteries P/N LC-R127R2P next replacement due July 2020.
- Serviced landing gear accumulator to 1150 psi with nitrogen referencing maintenance manual chapter 29-10-00.
- Removed left and right engine air filters and installed new air filters P/N RU-1620 Filters next due for replacement at 1537.9 ACT.
- Removed and installed new left and right fuel filters P/N WK724_3 referencing DA42NG maintenance manual chapter 28-20-00 leak check good.
- Complied with AD 2018-18-02 by determining that left and right engines have not experienced any wind milling restarts. Complied with paragraph g4 by inserting temporary revision TR-MAM-42-1104 restarting engine by wind milling in to chapter 3 of the pilots operating handbook.
- Installed new nose, left, and right gear indication downlock lights P/N 461K022801WS referencing maintenance manual chapter 32-60-00. Operational check good.
- Inserted pilots operating handbook revision #7 document # 7.01.15E.
- Removed GTX33 transponder P/N 011-00779-10 S/N 89103311 and installed new GTX 345R ADS-B transponder P/N 010-01217-03 S/N 3EH024572 under STC SA01714WI in accordance with installation instructions 190-00734-10 revision 12. Inserted flight manual supplement 190-00734-15 revision 3 dated Nov 30, 2017 in aircraft flight manual. The installed ADS-B system was shown to meet the equipment performance requirements of 14CFR section 91.227. No change in aircraft weight and balance. Form 337 filed.
- Removed rear passenger door, removed rear carbon hinge and installed new carbon hinge P/N DA4-5221-25-00_1 using bonding paste L285 resin and H286 hardener, DA40CPK dry paste kit. All work done Referencing maintenance manual chapter 51-20-00. Reinstalled rear passenger door and installed new door damper P/N DIA-9052-00-11.

CENCE
NUMBER

I certify that this Aircraft has been inspected in accordance with an annual inspection and was determined to be in Airworthy condition.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 7/5/19

SIGNED 
Jon Wieland for North Star Aviation FAA CRS NUTR521L

MODEL	DA42NG	NORTH STAR AVIATION	DATE	07/05/2019
SERIAL #	42.AC022	3030 AIRPORT ROAD		
REG #	N236TS	MANKATO, MN 56001		
Hobbs	1337.9	FAA CRS NUTR521L		
Tach		LOGBOOK INSERT	W/O	2320

I certify that the altimeter, static system, transponder, and altitude reporter test required by FAR's 91.411, 91.413 and 91.217 have been performed and found to be within the limits of far 43 appendices E & F.

TESTED TO 20,000 FT.

Altimeter Model GDU #1, S/N 88903027 Model United Inst. #2 S/N 457532

Transponder Model GTX-345R #1 S/N 3EH024572 Model N/A #2 S/N N/A

Encoder Model GDC-74 #1 S/N 47806953 Model N/A #2 S/N N/A

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

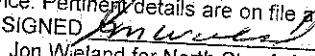
DATE 07/05/2019
SIGNED 
Stefan Boemer for North Star Aviation FAA CRS NUTR521L

MODEL	DA42NG	NORTH STAR AVIATION	DATE	11/27/19
SERIAL #	42.AC022	3030 AIRPORT ROAD	A/C TT	1416.1
REG #	N236TS	MANKATO, MN 56001		
Tach.	1416.1	CRS NUTR521L		
		LOGBOOK INSERT	W/O	2616

Complied with OSB42NG-076/1 by removing map lights and installing new map lights P/N D60-3313-11_01 using new light seal P/N D60-3313-10-02_01. Installed new emergency exit lever P/N D60-5200-71-00 and new lever seal D60-313-10-01-01. All work done in accordance with work order instructions WI-OSB42NG-076. Operational check good.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 11/27/19

SIGNED 
Jon Wieland for North Star Aviation FAA CRS NUTR521L

MODEL	DA42NG	NORTH STAR AVIATION	DATE	5/6/20
SERIAL #	42.AC022	3030 AIRPORT ROAD		
REG #	N236TS	MANKATO, MN 56001		
		CRS NUTR521L		
		LOGBOOK INSERT	W/O	2812

Removed battery RG24-15M S/N 40774928 and installed new battery RG24-15M S/N 41054391 referencing maintenance manual chapter 24-31-00.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 5/5/20

SIGNED

Jon Wieland for North Star Aviation FAA.CRS NUTR521L

MODEL	DA42NG	NORTH STAR AVIATION	DATE	5/26/20
SERIAL #	42.AC022	3030 AIRPORT ROAD	Tach.	1491.3
REG #	N236TS	MANKATO, MN 56001		
		CRS NUTR521L		
		LOGBOOK INSERT	W/O	2821

Removed left wheel disassembled cleaned and inspected no defects noted. Reassembled wheel using new tube P/N 097-500-0 and new tire P/N 156E66-4 S/N 91352018 reinstalled wheel and installed axle nut bolt. Removed right wheel disassembled cleaned and inspected no defects noted. Reassembled wheel using new tube P/N 097-500-0 and new tire P/N 156E66-4 S/N 91342156 reinstalled wheel and installed axle nut bolt. Installed new left and right brake linings P/N 066-10500.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 5/26/20

SIGNED

Joni Wieland for North Star Aviation FAA CRS NUTR521L

MODEL	DA42NG	NORTH STAR AVIATION	DATE	04-12-2021
SERIAL #	42.AC022	3030 AIRPORT ROAD		
REG #	N236TS	MANKATO, MN 56001		
		FAA CRS NUTR521L		
Tach	1504.6	LOGBOOK INSERT	W/O	3181

Updated Magnetic Variation Database software in accordance with Garmin Service Advisory NO.: 1612 Rev. F. System ops checked good.

I certify that the altimeter, static system, transponder, and altitude reporter test required by FAR's 91.411, 91.413 and 91.217 have been performed and found to be within the limits of FAR 43 appendices E & F.

TESTED TO 20,000 FT.

Altimeter Model GDC #1, S/N 47806953 Model United Inst. #2 S/N 457532

Transponder Model GTX-345R #1 S/N 3EH024572 Model N/A #2 S/N N/A

Encoder Model GDC #1 S/N 47806953 Model N/A #2 S/N N/A

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

DATE 04-12-2021

SIGNE

Stefan Boemer for North Star Aviation FAA CRS NUTR521L

CARRIED FORWARD

MODEL	DA42NG	NORTH STAR AVIATION	DATE	4/9/2021
SERIAL #	42.AC022	3030 AIRPORT ROAD	Tach.	1504.6
REG #	N236TS	MANKATO, MN 56001	TT	1504.6
		CRS NUTR521L		
		LOGBOOK INSERT	W/O	3181

17

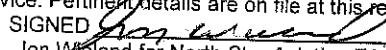
ENTRIES

DENCE
IMBER

- Completed an annual inspection referencing the checklist contained in the DA 42NG maintenance manual.
- Inspected ELT in accordance with FAR 91.207 para (d). Installed new battery P/N 455-0012 with an expiration date of November 2024.
- Performed operational check of TKS system.
- Cleaned and repacked wheel bearings.
- Lubricated aircraft and landing gear referencing maintenance manual chapter 12-20-00.
- Removed and installed 4 new ECU back up batteries P/N LC-R127R2P next replacement due April 2022.
- Installed new Emergency battery P/N D60-2560-91-00 replacement is next due April 2023.
- Serviced landing gear accumulator to 1150 psi with nitrogen referencing maintenance manual chapter 29-10-00.
- Removed left and right engine air filters and installed new air filters P/N RU-1620 Filters next due for replacement at 1704.6 ACT.
- Removed and installed new left and right fuel filters P/N WK724_3 referencing DA42NG maintenance manual chapter 28-20-00 leak check good.
- Installed new left and right exhaust pipe anti-vibration mounts P/N 140SUE04010.
- Installed new left engine turbo charger to intercooler hose P/N D64-716601-01-2.
- Installed new left and right engine turbo charger "V" clamps P/N D44-9081-26-03 using new nuts P/N BN175-M6-ZP referencing maintenance manual chapter 81-00-00.
- Installed new fuselage static line filter P/N 207.095.05_KL13.
- Removed rear passenger door, removed forward carbon hinge, and installed new carbon hinge P/N DA4-5221-26-00_1 using bonding paste L285 resin and H286 hardener, DA40CPK dry paste kit. All work done Referencing maintenance manual chapter 51-20-00. Reinstalled rear passenger door.
- Removed right landing gear leg and installed new landing gear leg P/N D60-3217-32-00 S/N RC2007513. Reinstalled trailing arm and damper assembly all work done referencing maintenance manual chapter 32-10-00. Completed landing gear functional check referencing maintenance manual chapter 32-20-00. No faults noted.
- Complied with AD 2020-15-05 by determining that left and right engines have not experienced any wind milling restarts. Complied with paragraph g4 by inserting temporary revision TR-MAM-42-1104 restarting engine by wind milling into chapter 3 of the pilots operating handbook.

I certify that this Aircraft has been inspected in accordance with an annual inspection and was determined to be in Airworthy condition.

The aircraft, and/or component identified above was repaired and/or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file at this repair station.

SIGNED 
Jon Wieland for North Star Aviation FAA CRS NUTR521L

MKT1116-05-2022 (06-15-2022)

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MAKE: Diamond Aircraft Ind
MODEL: Da 42
S/N: 42.AC022
REG. NO.: N236TS
W/O #: MKT1116-05-2022



North Star Aviation, Inc.
FAA Cert: NUTR521L
3030 N Airport Road
Mankato, MN 56001

DATE: 06-15-2022
A/C TT: 1602.70
A/C Tach: 1602.70

Airframe Entries

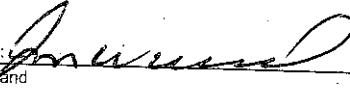
- Completed an annual inspection referencing the checklist contained in the DA 42NG maintenance manual. I certify that this Aircraft has been inspected in accordance with an annual inspection and was determined to be in Airworthy condition.
- Removed ELT and inspected in accordance with FAR 91.207 para (d). Battery expiration date is Nov. 2024. Reinstalled ELT.
- Removed lens and removed forward and aft bulbs. Installed new aft Nav. bulb P/N 34-0228070-67 and new forward Nav. light bulb P/N 34-0428020-66. Reinstalled lens. Operation check good.
- Removed and installed new Air Filter P/N RU-1620. Filter next due for replacement at 1802.7 ACTT.
- Removed and installed new Air Filter P/N RU-1620. Filter next due for replacement at 1802.7 ACTT.
- Removed left wheel disassembled cleaned and inspected no defects noted. Reassembled wheel using new tube P/N 302-246-401 and new tire P/N 156E66-4 S/N 82552247 reinstated wheel and installed axle nut bolt.
- Completed Read out EECU using the AE 300 Wizard. Sent the event log, event recorder, engine data log, data to Austro Engine. Examined the fault code memory of the EECU for failure. All work done in accordance with Austro E4 maintenance manual chapter 76-10-00.
- Removed fuel filter and installed new filter WK724-3 contained in the 100 hr. kit. In accordance with the DA42 maintenance manual chapter 28-20-00. Leak check good.
- Removed fuel filter and installed new filter WK724-3 contained in the 100 hr. kit. In accordance with the DA42 maintenance manual chapter 28-20-00. Leak check good.
- Removed EECU backup batteries. Installed 4 new batteries P/N LC-R127R2P in accordance with the DA 42 maintenance manual chapter 24-30-00. Battery replacement is next due June 2023.
- Installed new right jack point base P/N DV21200-00-02 in accordance with the DA42 maintenance manual.

MKT1116-05-2022 (06-15-2022)

Page 2 / 2

The aircraft, airframe, aircraft engine, propeller or appliance identified was repaired/inspected in accordance with current requirements of the Federal Aviation Administration and is approved for return to service. Pertinent details of this work order are on file at this Certified Repair Station#NUTR521L

DATE: 06-15-2022

SIGNED: 

Jon Wieland

FAA Cert: NUTR521L

WORK ORDER: MKT1116-05-2022

Printed by EBIS (EBISCloud.com)

MAKE: Diamond Aircraft Ind
MODEL: Da 42
S/N: 42.AC022
REG. NO.: N236TS



North Star Aviation, Inc.
FAA Cert: NUTR521L
3030 N Airport Road
Mankato, MN 56001

W/O #: MKT1658-12-2022
DATE: 12-15-2022
A/C TT: 1654.10
A/C Tach: 1654.10

Airframe Entries

- 1 Performed ice protection system bleeding and functional inspections. Operated system on all power settings and on both metering pumps along with windshield sprayer. Verified that all flight surface panels were "wetting out" and windshield sprayer bar was functioning per manufacturer's specifications. Serviced system tank with 4.5 gallons of anti-icing fluid. All work done in accordance with Diamond 42 NG Aircraft maintenance manual 12-10-00 section 9 and 30-00-00 section 2 and section 8-1.
- 2 Removed both LH and RH engine cowlings and inspected cabin heating system components with no discrepancies noted at this time. Reinstalled cowling. Inspected interior cabin heating system plumbing with no discrepancies noted at this time. All work completed in accordance with Diamond DA 42 NG aircraft maintenance manual 71-10-00, 21-00-00 and 21-40-00.

The aircraft, airframe, aircraft engine, propeller or appliance identified was repaired/inspected in accordance with current requirements of the Federal Aviation Administration and is approved for return to service. Pertinent details of this work order are on file at this Certified Repair Station#NUTR521L

DATE: 12-15-2022

SIGNED:

Brendon Butkiewicz
FAA Cert: NUTR521L

WORK ORDER: MKT1658-12-2022

Printed by EBIS (EBISCloud.com)

MAKE: Diamond Aircraft Ind
MODEL: Da 42
S/N: 42.AC022
REG. NO.: N236TS



North Star Aviation, Inc.
FAA Cert: NUTR521L
3030 N Airport Road
Mankato, MN 56001

W/O #: MKT1706-01-2023
DATE: 03-27-2023
A/C TT: 1672.4
A/C Tach: 1672.4

Airframe Entries

- 1 Removed damaged Garmin GMA85 P/N: 011-00894-08 S/N: 68707063 and Garmin GSA80 P/N: 011-00877-00 S/N: 66307563 and sent to Garmin for repair. Installed newly repaired Garmin GMA85 P/N: 011-00894-08 S/N: 68707063 and Garmin GSA80 P/N: 011-00877-00 S/N: 66307563 repaired under Garmin RMA 161730852. Installed equipment and adjusted servo clutch torque settings in accordance with the procedures and specifications outlined in the Diamond Aircraft Maintenance Manual for the DA 42 series Document# 7.02.01 Rev. 5 section 22-11-00.
- 2 Removed Garmin GMA 1347 Audio Panel P/N: 011-00809-00 S/N: 47107957 and installed overhauled Garmin GMA 1347 P/N: 011-00809-00 S/N: 47118225 in accordance with Garmin Installation Manual for the GMA 1347 190-00303-20 Rev. G.
- 3 Updated Garmin GTX 345R transponder Main System Software to version 2.80 and ADS-B Software to version 3.40 in accordance with the loading procedures outlined in Garmin Service Bulletin 22084 Rev. A. Reconfigured transponder to match new software settings in accordance with Garmin Installation Manual for the GTX-345 190-00734-10 Rev 16. Updated Garmin G1000 Integrated System Software to version 0670.15 to comply with Mandatory Diamond Service Bulletin MSB 42NG-003/31. Systems ops checked good.
- 4 Removed forward door guides and replaced with new guides P/N: DA4-5210-00-36. operation check good.

The aircraft, airframe, aircraft engine, propeller or appliance identified was repaired/inspected in accordance with current requirements of the Federal Aviation Administration and is approved for return to service. Pertinent details of this work order are on file at this Certified Repair Station#NUTR521L

DATE: 03-27-2023

SIGNED:

Stefan Boerner
FAA Cert: NUTR521L

WORK ORDER: MKT1706-01-2023

Printed by EBIS (EBISCloud.com)

MAKE: Diamond Aircraft Ind
MODEL: Da 42
S/N: 42.AC022
REG. NO.: N236TS



North Star Aviation, Inc.
FAA Cert: NUTR521L
3030 N Airport Road
Mankato, MN 56001

W/O #: MKT2647-11-2023
DATE: 05-02-2024
A/C TT: 1718.2
A/C Tach: 1718.2
Hobbs:

Airframe Entries

- 2 Completed an annual inspection referencing the checklist contained in the DA42NG maintenance manual. I certify that this aircraft has been inspected in accordance with an annual inspection and was determined to be in airworthy condition
- 8 All applicable Federal Aviation Administration Airworthiness Directives have been researched and complied with up to the date listed on this logbook label.
- 9 Complied with AD 2022-06-08 Preventing failure of the flap bell crank by replacing flap bell crank P/N D60-2757-11-00_01 and bushing P/N BU2-10-06-0065-C all work done in accordance with MSB 42-126/1. Operations check good.
- 10 Complied with AD 2020-22-14 Preventing Failure of the turbocharger waste gate control rod by replacing Waste gate control rod circlip P/N E4A-41-100-801. Operations check good.
- 11 Removed ELT and inspected in accordance with FAR 91.207 para (d). During inspection it was found that ELT batteries were expired. Removed and Replaced ELT Battery's P/N 452-6499 S/N 1005837-034 Expiration date: APR/2030 in accordance with Artx ME406 manual. Operations check good.
- 12 Removed right wheel disassembled cleaned and inspected no defects noted. Reassembled wheel using new tube P/N 302-246-401 and new tire P/N 156E66-4 S/N 93182258. Reinstalled wheel and cotter pinned axle nut. All work done in accordance with Diamond DA42 maintenance manual chapter 32-40-00.
- 13 Removed left wheel disassembled cleaned and inspected no defects noted. Reassembled wheel using new tube P/N 302-246-401 and new tire P/N 156E66-4 S/N 93192327. Reinstalled wheel and cotter pinned axle nut. All work done in accordance with Diamond DA42 maintenance manual chapter 32-40-00.
- 14 Removed RH brake removed linings and installed new linings P/N APS66-10500 using 105-00200 rivets. Reinstalled brakes. Completed brake lining conditioning. All work done in accordance with Diamond DA42 Maintenance Manual chapter 32-40-00.
- 15 Removed LH brake removed linings and installed new linings P/N APS66-10500 using 105-00200 rivets. Reinstalled brakes. Completed brake lining conditioning. All work done in accordance with Diamond DA42 Maintenance Manual chapter 32-40-00.
- 17 Removed and Replaced LH Navigational light lens P/N 68-4250066-30. All work performed in accordance with Diamond DA42 maintenance manual chapter 33-40-00. Operations check good.

CARRIED FORWARD

18 Serviced both Right and Left Propeller Accumulators in accordance with Diamond DA42 maintenance manual chapter 61-20-00.

19 Removed and Replaced LH engine intercooler with new P/N D64-9081-20-01 S/N 284R-M16. All work done in accordance with Diamond DA42 maintenance manual chapter 81-00-00. Operations and Leak check good.

20 Removed and Replaced Rear engine mounts P/N D64-7106-13-00 Forward LH mounts P/N D64-7126-14-70 and Forward RH mounts P/N D64-7126-14-71 in accordance with Diamond DA42 maintenance manual chapter 71-20-00. Operations check good.

21 Removed and Replaced 2 left hand Inboard wing vortex generators, P/N D64-5710-06-01 in accordance with Diamond DA42 maintenance manual.

22 Removed and Replaced RH Lower Cowl Bar intake P/N D60-7116-25-00 in accordance with Diamond DA42 maintenance manual chapter 71-10-00.

25 Removed and replaced ECU backup batteries P/N NP7-12 next replacement due May 2025. All work done in accordance with Diamond DA42 maintenance manual chapter 24-32-00.

26 Removed and Replaced Copilot reading light P/N RL6980-1 in accordance with Diamond DA42 maintenance manual chapter 33-10-00. Operations check good.

27 Inspected LH and RH engine mount areas with paint chipping for cracks or corrosion with no defects found. Touched up paint chipping on engine mounts in accordance with Diamond DA42 maintenance manual and AC43.13-1B.

28 Repainted Sides of fuselage and LH wing tip, all work done in accordance with Diamond DA42 maintenance manual chapter 52-20-10.

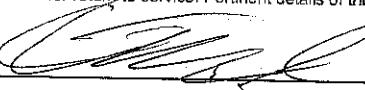
29 Removed RH engine bottom cowl and sanded down damaged area on radiator intake duct. Prepped damaged area for carbon repair lay up and laid up 1 ply of carbon over damaged area. Initial cured repair area at room temp for 24 hours and finished out with heat cure to allowable temps and time. all work done in accordance with Diamond DA42 maintenance manual chapter 51-20-00.

18

The aircraft, airframe, aircraft engine, propeller or appliance identified was repaired/inspected in accordance with current requirements of the Federal Aviation Administration and is approved for return to service. Pertinent details of this work order are on file at this Certified Repair Station#NUTR521L

DATE: 05-02-2024

SIGNED:



Carter Downs
FAA Cert: NUTR521L

WORK ORDER: MKT2647-11-2023

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LICENCE NUMBER