

# **AIRCRAFT TECHNICAL LOGS**

## **Section 1. AIRFRAME**

AIRCRAFT

1. Nationality and Registration N245DS
2. Manufacturer's Designation DA 40
3. Manufacturer's Serial Number 40.833
4. Type Approval or Specification Number A-224/A47CE
5. Date of Manufacture 2007
6. Aircraft Inspection Cycle \_\_\_\_\_



# AIR TIME AND

# ENGINEERING RECORD

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.	INSPECTION, REPAIRS & REPLACEMENT	SIGNATURE	LICENCE NUMBER
	HRS.	MIN.	HRS.	MIN.				
BROUGHT FORWARD			6	0				DA-Q 42

**Diamond**  
 DIAMOND AIRCRAFT INDUSTRIES INC.  
 D.O.T. APPROVED MANUFACTURER #161-93

I HEREBY CERTIFY THAT THIS AIRCRAFT CONFORMS TO THE APPROVED TYPE DESIGN DATA AND IS IN A FIT AND SAFE STATE FOR FLIGHT.

DATE AUG 29 2007 INSPECTOR DA Q 42

**Diamond**

U.S. Standard Airworthiness Certificate, issued:

(Date) AUG 31 2007, has been installed in the aircraft on behalf of NE-MIDO-46 on:

(Date) AUG 31 2007

(Print) R. Salton (Signature) [Signature]



November 23, 2007 QualTech Aviation, Inc.  
 Registration: N245DS - Make: Diamond - Model: DA-40 XL - S/N: 40.833  
 Tach: 35.0 - Airframe Total Time: 35.0  
 100 Hour Inspection

Opened all access panels and removed interior for inspection. Lubricated hinges, bellcranks, rod end bearings, etc. Serviced and recharged aircraft battery and reinstalled. Cleaned fuel strainer and replaced o-ring. Closed all access panels and reinstalled interior.

Verified ELT Battery expires October - 2009.  
 Tested ELT as per FAR 91.207(d), inspection next due November - 2008.

I certify that this airframe has been inspected in accordance with a 100 Hour Inspection and was determined to be in an airworthy condition.

Keith A. Allison  
 Keith A. Allison A&P 562571398

July 16, 2008 QualTech Aviation, Inc.  
 Registration: N245DS - Make: Diamond - Model: DA-40 XL - S/N: 40.833  
 Tach: 130.8 - Airframe Total Time: 130.8  
 100 Hour Inspection

Opened all access panels for inspection. Lubricated hinges, bellcranks, rod end bearings, etc. Charged aircraft battery and reinstalled. Cleaned fuel strainer and replaced o-ring. Placed aircraft on jacks and inspected landing gear. Removed aircraft from jacks and closed all access panels and reinstalled interior.

Complied with DRDC Info Bulletin No. 2008-4, Rev 0, dated February 25, 2008 by installation of engine ballast kit part number C41-7106-01-00. Revised aircraft weight and balance information.

Upgraded Garmin system software from 369.13 software to 321.19 software as per Garmin update instructions 190-00544-03, Revision 5. Performed post update instructions.

Verified ELT Battery expires October - 2009.  
 Verified ELT test as per FAR 91.207(d) is next due November - 2008.

I certify that this airframe has been inspected in accordance with a 100 Hour Inspection and was determined to be in an airworthy condition.

Charles H. Bonds  
 Charles H. Bonds A&P 3025225

November 23, 2007 QualTech Aviation, Inc.  
 Registration: N245DS - Make: Diamond - Model: DA-40 XL - S/N: 40.833  
 Tach: 35.0 - Airframe Total Time: 35.0  
 Annual Inspection

I certify that this aircraft has been inspected in accordance with an Annual inspection and was determined to be in an airworthy condition.

Ignacio Vazquez Jr.  
 Ignacio Vazquez Jr. A&P 3022092 IA

December 03, 2008 QualTech Aviation, Inc.  
 Registration: N245DS - Make: Diamond - Model: DA-40 XL - S/N: 40.833  
 Tach: 176.5 - Airframe Total Time: 176.5  
 100 Hour Inspection

Opened all access panels for inspection. Lubricated hinges, bellcranks, rod end bearings, etc. Charged aircraft battery and reinstalled. Cleaned fuel strainer and replaced o-ring. Placed aircraft on jacks and inspected landing gear. Cleaned, inspected, and packed all wheel bearings. Replaced pilot's storm window seal. Removed aircraft from jacks and closed all access panels and reinstalled interior.

Complied with AD 2007-17-06, dated September 25, 2007, by inspection of nose landing gear leg per the accomplishment instruction of Diamond MSB 40-046/1. No defects found. Next inspection due December - 2009 or airframe total time 376.5, whichever occurs later.

Verified ELT Battery expires October - 2009.  
 Tested ELT as per FAR 91.207(d). Inspection next due December - 2009.

I certify that this airframe has been inspected in accordance with a 100 Hour inspection and was determined to be in an airworthy condition.

Charles H. Bonds  
 Charles H. Bonds A&P 3025225

March 17, 2008 QualTech Aviation, Inc.  
 Registration: N245DS - Make: Diamond - Model: DA-40 XL - S/N: 40.833  
 Tach Time: 40.3  
 G1000 Phase 6-1 Update per STC# SA01444WI-D

Upgraded G1000 System Software Version from 0369.12 to 0369-13 as per the -2 configuration of STC # SA01444WI-D. This configuration is for the G1000 with GFC 700 AFCS, and no WAAS. Diamond Aircraft Part Number G1000Phase6-1 Upgrade kit was purchased for this upgrade. All work was accomplished using the documents required per Garmin Master Drawing List Number 005-00400-01, Rev 3. Placed Cockpit Reference Guide p/n 190-00324-07 in aircraft and gave Flight Manual Supplement p/n 190-00492-10 to owner. No change in weight or balance. Completed and filed FAA Form 337 this date.

Charles H. Bonds  
 Charles H. Bonds A&P 3025225

AIR TIME AND

2008

QuallTech Aviation, Inc.  
 Registration: N245DS - Make: Diamond - Model: DA-40 XL - S/N: 40.833  
 Tach: 176.5 - Airframe Total Time: 176.5 - Hobe: 226.3  
 Annual Inspection

I certify that this aircraft has been inspected in accordance with an Annual Inspection and was determined to be in an airworthy condition.

*Ignacio Vazquez Jr.*  
 Ignacio Vazquez Jr. A&P 3022092 IA

June 15, 2009

QuallTech Aviation, Inc.  
 Registration: N245DS - Make: Diamond - Model: DA-40 XL - S/N: 40.833  
 Tach Time: 215.3  
 General Maintenance

Performed ground diagnostic tests on Aviadyn TAS800 and found TAS Processor to be defective. Removed processor model 9900BX, serial number 0705074 from aircraft. Unit was repaired by Aviadyn. Reinstalled processor and loaded software. Ground operational tests were normal.

*Charles Bonds*

Charles H. Bonds A&P 3025225

ENGINEERING RECORD

DRIZED RELEASE CERTIFICATE

Form 8130-3, AIRWORTHINESS APPROVAL TAG

Olathe, KS 66062

3. System Tracking Ref. No.

SO # 1037580

5. Work Order Contract/Invoice Number

SO # 1037580

9. Eligibility: *	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:
-00	N/A	1	47806947
			OVERHAULED

has been analyzed, reworked, tested, and conforms to the Newly Overhauled process set forth by Garmin. Please refer to Garmin SB 0606

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approved aircraft system software once the unit is reinstalled in the aircraft in order to complete the return to service process. Correct appropriate avionics/line maintenance manual.

ried out in accordance with EASA Part-145 and in respect to that work the component is ready for release to service under EASA Part-145. The work performed on this unit was done to meet the requirements of the maintenance manual part number 190-00364-00 Rev- W, Revision

conformity to: 19.  14 CFR 43.9 Return to Service  Other regulations specified in Block 13

ation 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.

16. Approval/Authorization No.: N / A	20. Authorized Signature: <i>Tu Nguyen</i>	21. Approval/Certificate No.: G6XR582Y
18. Date (m/d/y): N / A	22. Name (Typed or Printed): Tu Nguyen	23. Date (m/d/y): Sep 11 2009

User/Installer Responsibilities

ent alone does not automatically constitute authority to install the part/component/assembly. The national regulations of an airworthiness authority different than the airworthiness authority of the country specified in the airworthiness authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in

certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the applicable technical data.

DATE

BROUGHT FORWARD

I certify that the transponder in this aircraft has been tested and meets the requirements of FAR 91.413 and FAR 43- Appendix F.

Signed *[Signature]* Date: 9-23-09

Work Order Number 17372

SOLAPP AVIONICS INC. CRS OSJR598L  
SUGAR LAND MUNICIPAL AIRPORT  
12888 Highway 6 S.  
Sugar Land, TX 77498

GTX33  
N245DS

9-23-2009 N245DS S/N40.833

WO17372

REMOVED AN ALTIMETER GDC74A P/N011-00882-00 S/N47808006 AND INSTALLED AN OVERHAULED WARRANTY EXCHANGE ALTIMETER P/N 011-00882-00 S/N 47806947. RAN THE CERTIFICATION AND OPERATIONS CHECKED NORMAL. THE AIRCRAFT WAS RETURNED TO SERVICE.

SOLAPP Avionics Inc. CRS OSJR598L  
12888 Highway 6 S. STE 105  
Sugar Land, TX 77478

*[Signature]*

I certify that the altimeter static systems and altitude reporting equipment were tested and meet the requirements of FAR 91.411 and FAR 43 Appendix E.

Altimeter tested to 70,000 feet.

Signed *[Signature]* Date: 9-23-09  
Work Order Number 17372

SOLAPP AVIONICS INC. CRS OSJR598L  
SUGAR LAND MUNICIPAL AIRPORT  
12888 Highway 6 S.  
Sugar Land, TX 77498

N245DS

April 23, 2009

QualiTech Aviation, Inc.  
Registration: N245DS - Make: Diamond - Model: DA-40 XL - S/N: 40.833  
Tach Time: 205.5  
General Maintenance

Removed existing ACK ELT unit, base, antenna, and remote switch. Installed New ELT ME408 kit, part number 453-6814 as direct replacement. Installed new ELT unit p/n 453-6803 Rev D, serial number 188-05464, new remote switch, mounting tray, antenna, and buzzer. Tested ELT as per manufacturer instructions and gave operations/instruction manual to aircraft owner. ELT manufacture date is 50/08. HEX ID is ADCC405560002F1 and Country Code is 366.

*[Signature]* Charles H. Bonds A&P 3025225

November 11, 2009

QualiTech Aviation, Inc.  
Registration: N245DS - Make: Diamond - Model: DA-40 XL - S/N: 40.833  
Tach: 246.5 - Airframe Total Time: 246.5  
100 Hour Inspection

Opened all access panels for inspection. Lubricated hinges, bellcranks, rod end bearings, etc. Replaced aircraft battery with new Gill G243S battery, serial number G02468467. Cleaned fuel strainer and replaced o-ring. Placed aircraft on jacks and inspected landing gear. Replaced both main tires and Tubes with new Condor tires p/n 072-449-0 and Michelin Airstop Tubes p/n 097-500-0. Checked and adjusted nose fork steering friction. Removed aircraft from jacks and closed all access panels and reinstalled interior.

Complied with AD 2009-07-14, dated May 11, 2009, by inspection of the adhesive joint between the wing main spar caps and the upper wing skin for voids as per Diamond WI-MSB-F4-016. No voids that exceeded the inspection criteria were found. No further action required.

AD 2009-10-04, dated June 17, 2009, does not apply to the installed nose gear leg, as per paragraph (c)(2), due to the part number D41-3223-10-00-1 installed. No further action required.

Verified ELT Battery expires April - 2011.

Tested ELT as per FAR 91.207(d). Inspection next due November - 2010.

I certify that this airframe has been inspected in accordance with a 100 Hour Inspection and was determined to be in an airworthy condition.

*[Signature]* Charles H. Bonds A&P 3025225

November 11, 2009

QualiTech Aviation, Inc.  
Registration: N245DS - Make: Diamond - Model: DA-40 XL - S/N: 40.833  
Tach: 246.5 - Airframe Total Time: 246.5  
Annual Inspection

I certify that this aircraft has been inspected in accordance with an Annual inspection and was determined to be in an airworthy condition.

*[Signature]* Ed Bautista A&P 337488916 IA

2/1/2010 N245DS S/N DA40.833

W17619

THE SOFTWARE FOR G1000 WAS UPGRADED FROM 0321.19 TO 0321.22. IN ACCORDANCE WITH SERVICE BULLETIN 0919 REV A. OPERATIONS CHECKED NORMAL. THE WORK WAS PERFORMED IN ACCORDANCE WITH CURRENT FAA REGULATIONS AND AIRCRAFT IS RETURNED TO SERVICE.

SOLAPP Avionics Inc. CRS OSJR598L  
12888 Highway 6 S. STE 105  
Sugar Land, TX 77478

*[Signature]*

# 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	Hobb's				
4/15/2010	375				Tach 286.5 Accomplished 50 hours Inspection Air 3410335 Phil Leeder

11/24/2010 TACH 371.4 TTAF 371.4 COMPLETED ANNUAL INSPECTION I/A/W DIAMOND SERVICE MANUAL SECTION 4 & 5. REPLACED WORN BRAKE PADS BOTH MAIN GEAR ALL 4. REPLACED RIGHT MAGNETO SLICK 4370 SN# 10110106. REPLACED ENGINE DRIVEN FUEL PUMP. REPLACED ELT BATTERY ARTEX PN# 452-6499. C/W MSB WI-MSB-40-060 / WI-MSB-F4-016 FOUND NO VOIDS IN WING SKIN TO SPARS BOTH WINGS BOTH FWD SPAR AND REAR SPAR. C/W MSB-40-054/1 & MSB-F4-013 REINFORCEMENT OF PITOT STATIC & STALL WARNING LINES INSTALLED KIT MSB-40-070-KIT. CHECKED ELT AS PER FAR 91-207 (d) BATTERY REPLACEMENT DATE IS 11/2016. COMPLIED AD RESEARCH AND COMPLIANCE LIST SEE LIST FOR FURTHER DETAILS. MSB F4-024 DOOR RETAINING BRACKET IS N/A BY SN#. MSB -F4-014 100 OHM RESISTOR IS N/A BY SN# REPLACED AIRCRAFT EMERGENCY BACK UP BATTERY PN# D60-2560-91-00. C/W AD 2008-14-07 ENGINE FUEL LINES INSPECTION. THIS AIRCRAFT WAS FOUND IN AIRWORTHY CONDITION AND IS APPROVED FOR RETURN TO SERVICE.  
A&P IA 3410335  
PHIL LEEDER *Phil Leeder*

Wulfsberg Electronics Division  
Prescott, AZ 86301 USA  
CAGE Code 1B7G3  
ME406 LITHIUM BATTERY PACK MnO2  
PART NO: 452-6499 REV: A  
TSO C126 W.O.# 34740-208  
EXPIRATION DATE: NOV/2016 DO-227  
ENV CAT D1XBC[B204]204JXRXXXXXXZAZZ204HXXXXXX

2-15-2011					Tach 385.9 Replaced Gill G243S BATTERY WITH LEONARDE AG24-15M. PRIOR TO INSTALLATION BATTERY TESTED AT 265001 A/P 3255681 <i>Tom Leeder</i>
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I certify that the transponder in this aircraft has been tested and meets the requirements of FAR 91.413 and FAR 43-Appendix F.  
Signed: *Tom Leeder* Date: 10-3-2011  
Work Order Number: *NI 8729*  
Certified Repair Station OSJR598L

SOLAPP AVIONICS INC  
SUGARLAND MUNICIPAL AIRPORT  
12888 Highway 6 S. STE 105  
Sugar Land, TX 77498

GTx 73

CARRIED FORWARD

INSPECTION, REPAIRS & REPLACEMENT

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

SIGNATURE

LICENCE NUMBER

I certify that the altimeter static systems and altitude reporting equipment were tested and meet the requirements of FAR 91.411 and FAR 43 Appendix E.

Altimeter tested to 20000 feet.

Signed [Signature]  
Work Order Number N18729

Date: 10-3-2011

SOLAPP AVIONICS INC. CRS OSJR598L  
SUGAR LAND MUNICIPAL AIRPORT  
12888 Highway 6 S.  
Sugar Land, TX 77498

GDC 74  
S/N 47806947

N18729

SOLAPP AVIONICS INC.  
Altimeter scale  
Correction Card

Altimeter S/N RAN-N-AC CRS #OSJR598L  
Part No. 5934 P-1

ALT.FT.	READS	ALT.FT.	READS	ALT.FT.	READS
-1000	-1000	6000	6000	22000	X
0	10	8000	7985	25000	
500	510	10000	9980	30000	
1000	1015	12000	11955	35000	
1500	1520	14000	13950	40000	
2000	2020	16000	15940	45000	
3000	3025	18000	17950	50000	
4000	4015	20000	19995		

Inspected and released by: [Signature] Date: 10-3-11

W18729

SOLAPP AVIONICS INC.  
Altimeter scale  
Correction Card

Altimeter S/N 47806947 CRS #OSJR598L  
Part No. GDC 74

ALT.FT.	READS	ALT.FT.	READS	ALT.FT.	READS
-1000	-990	6000	6010	22000	
0	10	8000	8010	25000	
500	510	10000	10010	30000	
1000	1010	12000	12010	35000	
1500	1510	14000	14010	40000	
2000	2010	16000	16010	45000	
3000	3010	18000	18010	50000	
4000	4010	20000	20015		

Inspected and released by: [Signature] Date: 10-3-11



A I D T I M E A N D

11/28/2011 TACH 448.7 TTAF 448.7 COMPLETED ANNUAL INSPECTION I/A/W DIAMOND SERVICE MANUAL SECTION 4 & 5. C/W EMERGENCY LEVER INSPECTION/ REPLACEMENT. MSB-40-067 BY INSTALLATION OF KIT MSB-40-067-KIT. C/W MSB WI-MSB-40-060 / WI-MSB-F4-016 FOUND NO VOIDS IN WING SKIN TO SPARS BOTH WINGS BOTH FWD SPAR AND REAR SPAR. MSB 40-070/1 REINFORCEMENT BY REPLACEMENT OF THE PASSENGER DOOR LATCH IS NA BY SN#. CHECKED ELT AS PER FAR 91-207 (d) BATTERY REPLACEMENT DATE IS 11/2016. COMPLIED AD RESEARCH AND COMPLIANCE LIST SEE LIST FOR FURTHER DETAILS. AD 2008-14-07 ENGINE FUEL LINES INSPECTION. THIS AIRCRAFT WAS FOUND IN AIRWORTHY CONDITION AND IS APPROVED FOR RETURN TO SERVICE  
 A&P IA 3410335  
 PHIL LEEDER *Phil Leeder*

ORD  
 AS REQUIRED FOR COMPLE

2/3/2012	4600	S/N 109208	Remove & Replace Fuel Pump AIP IA 3410335 <i>Phil Leeder</i>

DUKES, INC.  
 ACCEPTANCE TEST PROCEDURE ATP 51

DATA SHEET

DUKES, INC. P/N 5100-00-9 S/N: 109

**REQUIREMENT**

**3.1 PROOF PRESSURE TEST**

Outlet port capped, inlet port pressurized to 100 psi air. There shall be no evidence of gross leakage, deformation, or rupture of the pump assembly.

**3.2 EXTERNAL LEAKAGE TEST**

18

12/05/2012 TACH 516.9 TTAF 516.9 COMPLETED ANNUAL INSPECTION I/A/W DIAMOND SERVICE MANUAL SECTION 4 & 5. REPLACE RUDDER CABLES. CHECKED ELT AS PER FAR 91-207 (d) BATTERY REPLACEMENT DATE IS 11/2016. REMOVED EXHAUST CLEANED INSPECT SLIP JOINTS. COMPLIED WITH AD 2010-25-01 BY INSTALLATION OF TEMP REVISION INTO POH. AD 93-05-06 IGNITION SWITCH INSPECTION IS DUE @ TTAF 2000. COMPLIED AD RESEARCH AND COMPLIANCE LIST SEE LIST FOR FURTHER DETAILS. AD 2008-14-07 ENGINE FUEL LINES INSPECTION. THIS AIRCRAFT WAS FOUND IN AIRWORTHY CONDITION AND IS APPROVED FOR RETURN TO SERVICE.  
 A&P IA 3410335  
 PHIL LEEDER *Phil Leeder*


08/09/2013 TACH 560.9 TTAF 560.9 COMPLETED ANNUAL INSPECTION I/AW DIAMOND SERVICE MANUAL SECTION 4 & 5. REPLACE EMERGENCY BACK UP BATTERY PN# D60-2560-91-00 NEXT REPLACEMENT DUE 08/2015. CHECKED ELT AS PER FAR 91-207 (d) BATTERY REPLACEMENT DATE IS 11/2016. REMOVED EXHAUST SYSTEM CLEANED & INSPECT SLIP JOINTS APPLIED ANTI-SEIZE AND RE-INSTALLED EXHAUST SYSTEM. AD 93-05-06 IGNITION SWITCH INSPECTION IS DUE @ TTAF 2000. MSB 40-074 MAIN SPAR REINFORCEMENT NOT DUE UNTIL TTAF 2000 BUT NO LATER THAN 12/31/2022. COMPLIED AD RESEARCH AND COMPLIANCE LIST SEE LIST FOR FURTHER DETAILS. THIS AIRCRAFT WAS FOUND IN AIRWORTHY CONDITION AND IS APPROVED FOR RETURN TO SERVICE.  
 A&P IA 3410335  
 PHIL LEEDER *Phil Leeder*

06/16/2014 TACH 666.6 REPLACED RIGHT WING TIP DUE TO SCRATCHED PAINT. WING TIP WAS NOT STRUCTURALLY COMPROMISED.  
 A&P IA 3410335  
 PHIL LEEDER *Phil Leeder*

**BAHAN AVIATION SERVICES**  
281-451-2163

**N245DS 9/7/2014 Tach 691.4 Hobbs 891.0 Annual this date & time**  
 -Removed all inspection panels, and covers.  
 -Inspected and lubed all hinges, pullies, bell cranks.  
 -Examined aircraft exterior for condition and any evidence of damage.  
 -Removed pilot, co-pilot and passenger seats and inspected seat shells. Inspected airframe structure and all electrical connections for security.  
 -Inspected control sticks and control system. Lubed rod ends and pullies. Re-installed seats.  
 -Removed glareshield and inspected all connections for condition and security. Re-installed glare shield.  
 -Verified operation of fuel shut off valve during run up. Removed gascolator and cleaned screen. Re-installed and pressure checked for leaks.  
 -ELT Tested I/AW 91.207(d). Batteries due 11/2016. Re-installed into aircraft.  
 -Verified operation of all lighting and lamps.  
 -Serviced brake reservoirs (left/right) as needed with clean MIL-H-5606  
 -Inspected battery for security and for condition.  
 -Removed wheels and repacked wheel bearings. Reinstalled wheels.  
 -Removed Powerflow muffler insert and replaced with new item, PFS-8016, s/n 14-0640. Secured with new hardware.  
 -The following AD's will be due:  
 AD 93-05-06 (ACS Ignition Switch) Due for inspection at 2,000 hours TIS  
 AD 2014-13-08 (Aft spar reinforcement) Due within the next 2000 hours or by 12/31/2022  
 -All AD's checked through this date ATP Navigator V and an AD compliance listing created.  
 -All maintenance performed in reference to the Diamond DA40 maintenance manual  
 -I certify this airframe has been inspected I/AW an annual inspection and found to be in airworthy condition.

*C. J. Bahan*  
 Christopher James Bahan A&P/I.A. 2688469



General Aviation Services  
 5260 Central Pkwy. Hangar 14  
 Conroe, TX 77303

**Airframe Logbook Entry**

Tach# 780.6 Hobbs# 1003.7  
 ACTT# 780.6

Registration: N245DS  
 Make: Diamond  
 Model: DA-40  
 Serial: 40.833

1. Removed right and left main tire and installed new Michelin Condor 15X6.00 x 6 ply tire and new Tube 15X6.00 x 6 and repacked wheel bearings and reinstalled left and right main tires assemblies.
  2. Serviced all tires according to manufacturer's specifications
  3. Checked for security and overall condition of work performed, all satisfactory
- I certify that all work was done in accordance with FAA regulations and approved maintenance manual. This Airframe was found to be in an airworthy condition, and is approved for return to service with respect to work performed this date.

END

Date: 08/14/2015

Authorized Signature:  
*Gary Barber*

Gary Barber  
 A&P 3723248



ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT

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

SIGNATURE

LICENCE NUMBER



Date: 01/06/2017 Tach: 926.3 AFTT: 926.3 Reg.#: N245DS

C/W Annual inspection referencing FAR Part 43 appendix (d) and Diamond DA-40 inspection checklist and service/maintenance manuals. C/W FAR 91.207(d) ELT functional test, replaced battery pack with new Artex ME406 Lithium Battery pack MnO2 P/N: 452-6499. ELT battery due for replacement on Jan 2024. Lubricated airframe referencing DA-40 AMM lubrication schedule. Inspected all drain holes and water traps per AMM section 05-25-00. Replaced wing T-seal P/N: 1110762 on both wings. Inspected autopilot mechanical system. Cleaned, inspected, and re-packed all wheel bearings. Replaced brake linings with new RAPCO RA66-10600 brake linings. Inspected brake caliper seals for leaks and checked temperature indicators on brake calipers for a white maker indication. Re-sealed left brake caliper with new O-rings and bleed hydraulic system. Serviced brake fluid reservoirs. Pressure leak checked exhaust system. Verified AD compliance bi-weekly to 01/06/2017 per manufacturer. No new applicable AD's found at this time. A complete AD summary has been furnished to the aircraft owner and is part of the aircraft permanent records. Run-up and leak check, Ok. I certify that this aircraft has been inspected in accordance with an annual inspection and was determined to be in an airworthy condition at this time. A&P 3168048 IA JD JD Casteel

ACR ELECTRONICS, Inc.  
ARTEX PRODUCTS - CAGE Code: 18560  
Fort Lauderdale, FL 33312  
ME406 LITHIUM BATTERY PACK MnO2  
PART NO: 452-6499 REV: F  
TSO C126 S.N.:371865-006  
EXPIRATION DATE: JAN /2024 DO-227  
ENV CAT D1XBC[204][204]XR00000ZAZZ[204]H[D000X]00X

N# 245DS S/N 40,833 AC Model DA40

I certify that the altimeter and static system tests required by FAR Part 91.411 have been performed in accordance with FAR 43, Appendix E

#1 Altimeter has been tested to 20K feet tested on date: 1-6-2017 (altimeter test date)

Altimeter PN: 3DC74 S/N 47806131

#2 Altimeter has been tested to 20K feet tested on date: 1-6-2017 (altimeter test date)

Altimeter PN: 5934PD-3 S/N 462191

Integrated System tests performed in accordance with FAR 43, Appendix E.

Signature: [Signature]

Date: 1-6-2017 WO# 832 ACTT 926.3

Certificate No.: CRS# T6ER555Y

Time Aerospace LLC

N# 245DS S/N 40,833 AC Model DA40

I certify that the Transponder system and integrated system tests required by FAR 91.413 have been performed in accordance with FAR 43 Appendix F.

#1 XPNDR PN: GTX 33 S/N 99104599

#2 XPNDR PN: NA S/N NA

Signature:

Date: 1-6-2017 WO# 832 ACTT 926.3

Certificate No.: CRS# T6ER555Y

Time Aerospace LLC

DATE

DATE		MFG.	
HRS.	MIN.	HRS.	MIN.

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

BROUGHT FORWARD

**AIRFRAME**

Reg: N245DS  
 Model: DA 40  
 S/N: 40.833  
 W/O: MS-17-03616



Date: 6 April 2017  
 Hobbs: 1,232.1  
 Tach: 959.9  
 ACTT:

Removed and replaced the battery blast tube with SCAT 4 tubing.

The aircraft, airframe, engine, propeller, or appliance identified above was repaired and inspected in accordance with current Regulations of the Federal Aviation Administration and is approved for return to service with respect to the work performed. Pertinent details are on file under the above work order.

Signed:

CRS #M9TR576Y  
 525 Turbine Ave, Chesterfield, MO (636)532-6155

**AIRFRAME**

Reg: N245DS  
 Model: DA 40  
 S/N: 40.833  
 W/O: MS-17-03891



Date: 23 January 2018  
 Hobbs: 1,357.1  
 Tach: 1,058.0  
 ACTT: 1,058.0

Scheduled Inspections/Maintenance Checks:

- 1) Complied with the **Annual Inspection/200 Hour Check** per the "Maintenance Checklist Airframe" in reference to Diamond DA 40 Series Airplane Maintenance Manual, Doc.#6.02.01, Rev. 7, Chapter 05-28-50.
- 2) Complied with the **Annual Inspection/200 Hour Check** per the "Maintenance Checklist DA 40 with Lycoming IO-360-M1A Engine" in reference to Diamond DA 40 Series Airplane Maintenance Manual, Doc.#6.02.01, Rev. 7, Chapter 05-28-00.

Airworthiness Directives / Service Bulletins:

- 3) Complied with **AD 2017-04-06**, effective date 4/7/2017, by verification of the United Instruments altimeter serial number (s/n 462191) and determined no action is required per United Instruments Service Bulletin No. 13, dated 3/25/2016.

Maintenance Actions:

- 4) Performed an engine ground run per FAR 43.15(c)(2) in reference to DA 40 Series AMM 05-28-91 Engine Ground Test. Operational checks were satisfactory. No leaks or defects noted.

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

The aircraft, airframe, engine, propeller, or appliance identified above was repaired and inspected in accordance with current Regulations of the Federal Aviation Administration and is approved for return to service with respect to the work performed. Pertinent details are on file under the above work order.

Signed:

CRS #M9TR576Y  
 525 Turbine Ave, Chesterfield, MO (636)532-6155

**AIRFRAME**

Reg: N245DS  
 Model: DA 40  
 S/N: 40.833  
 W/O: MS-17-03891



Date: 23 January 2018  
 Hobbs: 1,357.1  
 Tach: 1,058.0  
 ACTT: 1,058.0

Scheduled Inspections/Maintenance Checks:

- 1) Complied with the 12 month **ELT inspection/functional test** and found it meets the requirements of FAR 91.207(d). Battery expires Jan 2024.

The aircraft, airframe, engine, propeller, or appliance identified above was repaired and inspected in accordance with current Regulations of the Federal Aviation Administration and is approved for return to service with respect to the work performed. Pertinent details are on file under the above work order.

Signed:

CRS #M9TR576Y  
 525 Turbine Ave, Chesterfield, MO (636)532-6155

CARRIED FORWARD

# ENGINEERING RECORD

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

Reg: N245DS  
 Model: DA 40  
 S/N: 40.833  
 W/O: MS-17-03896



Date: 23 January 2018  
 Hobbs: 1,357.1  
 Tach: 1,058.0  
 ACTT: 1,058.0

Scheduled Inspections/Maintenance Checks:

- 1) Complied with the 1000 hour **Essential Bus** inspection and function test in reference to DA 40 Series AMM 04-00-00, Page 3. No defects noted.
- 2) Complied with the 1000 hour **Bonding System and Static Discharging System** resistance measurements in reference to DA 40 Series AMM 51-80-00. No defects noted.
- 3) Complied with the 2 year **Emergency Battery Pack** replacement (p/n D60-2560-91-00 s/n 17-292-22) in reference to DA 40 Series AMM 24-32-00, Page 203-204. Voltage check at the switch was satisfactory.
- 4) Complied with the 12 month **Aircraft Battery** capacity test (p/n RG24-15M, s/n 40407073) and the battery failed the test. Top-charged and installed a new battery (p/n RG24-15M, s/n 40914097) in reference to current Concorde CMM Doc. No. 5-0171 and DA 40 Series AMM 24-31-00.
- 5) Complied with the 100 & 500 hour/annual **Power Flow Exhaust System** ICA requirements by inspection of the exhaust in reference to current Power Flow Installation Instructions, PFS-15102, Section 5.0. Installed a new #1 header (p/n 11550), a new #2 header (p/n 12550), a new #3 header (p/n 13550), a new #4 header (p/n 14550), a new collector assembly (p/n 33003), and a new muffler (p/n 80062 B) in reference to current Power Flow Installation Instructions, PFS-15102, Section 4.0.
- 6) Complied with the 7 year **AMSAFE Electronic Module Assembly** refurbishment. Removed the EMA and sent to AMSAFE Inc, CRS# PQ1967NM. The EMA (p/n 508358-421, s/n RA22DEC17-13) was rebuilt under work order no. 141307-1. Reinstalled the rebuilt EMA.
- 7) Complied with the annual **G1000 Visual Inspection** ICA requirement in reference to the current G1000 System Maintenance Manual-Diamond DA 40/40F, Section 4.4. No defects noted.
- 8) Complied with the annual **GFC 700 Visual Inspection** ICA requirement in reference to the current G1000 System Maintenance Manual-Diamond DA 40/40F, Section 4.4. No defects noted.
- 9) Complied with the 24 month **G1000 Lightning Protection Fuses** replacement by installation of new fuses (p/n 313 03.2) in reference to Garmin G1000/GFC 700 System Maintenance Manual 190-00545-01.
- 10) Complied with the annual **G1000 PFD/MFD Power Interrupt Function Check** ICA requirement by the check in reference to the current G1000 System Maintenance Manual-Diamond DA 40/40F, Section 4.13. Check was satisfactory.
- 11) Complied with the 1000 hour/36 month **GSA 81 Servos** cleaning and lubrication of the output gears in reference to the current G1000 System Maintenance Manual-Diamond DA 40/40F, Section 4.8.
- 12) Complied with the 500 hour/12 month **GSM 85 Servo Mounts** check of the slip clutch torques. Removed the servo clutches (p/n 011-00894-07, s/n's 68605521 and 68605437; p/n 011-00894-04, s/n 66800138) and sent to Aero Charter, CRS# DGCR175D, for testing under work order no. 17-578. Reinstalled the servo mounts in reference to Garmin G1000/GFC 700 System Maintenance Manual 190-00545-01, chapter 6 section .10, .11. Operational check was satisfactory.

Maintenance Actions:

- 13) Disabled the malfunctioning CO detector. Installed a new visual CO detector.
- 14) Removed and replaced the right vent window latch with new (p/n 301.25.4110).
- 15) Adjusted the cabin heat valve cable for proper travel. Operational check satisfactory.
- 16) Removed and replaced the left aft recognition light bulb with new (p/n 34-0428070-64) in reference to DA 40 Series AMM 33-40-00, Page 211. Operational check satisfactory.
- 17) Repaired the elongated mounting holes for the nose wheel fairing in reference to DA 40 Series AMM 51-20-00.
- 18) Removed the nose wheel fork. Removed and replaced the stop plate (p/n D41-3223-00-51) and fork limiters (p/n D44-3223-30-32\_01) with new. Cleaned and lubricated the fork bearing. Reinstalled nose wheel fork. Work performed in reference to DA 40 Series AMM 32-20-00.
- 19) Removed and replaced the left and right brake discs with new (p/n RA164-24400) and brake linings with new (p/n 066-14100) in reference to Cleveland Component Maintenance Manual AWBCMM0001-19/USA and DA 40 Series AMM 32-40-00.
- 20) Adjusted the rudder cable tension to within limits in reference to DA 40 Series AMM 27-20-00.
- 21) Removed and replaced the heater hose with new p/n (SCAT11).
- 22) Removed and replaced the engine induction air filter with new (p/n FR-08504) in reference to DA 40 Series AMM 71-60-00.
- 23) Cleaned and painted the rudder bellcrank and replaced the hardware with a new bolt (p/n LN9037-M6x58) and new nut (p/n DIN985-M6-ZP).
- 24) Removed and replaced one right main wheel fairing receptacle (p/n 212-12) and stud (p/n 26S8-6) with new.
- 25) Removed and disassembled the right brake caliper. Reassembled the brake with new o-rings (2 ea. p/n MS28775-224) and reinstalled. Work performed in reference to Cleveland Component Maintenance Manual AWBCMM0001-19/USA, Section 300 (2). Serviced and bled the brakes. Operational and leak check was satisfactory.

The aircraft, airframe, engine, propeller, or appliance identified above was repaired and inspected in accordance with current Regulations of the Federal Aviation Administration and is approved for return to service with respect to the work performed. Pertinent details are on file under the above work order.


Signed:

CRS #M9TR576Y  
 525 Turbine Ave, Chesterfield, MO (636)532-6155


# 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.	
BROUGHT FORWARD					
02-04-19	Hobbs: 1390.5				Annual inspection completed IAW FAR 43 and Diamond MM. Lubricated all flight controls. Serviced wheel bearings. ELT insp IAW FAR 91.207(d). All applicable ADs complied with. See AC records for complete AD list. I certify this aircraft has been inspected IAW an annual insp., and has been found to be airworthy at this time. <i>JL G. D. A&amp;P 2759588 IA</i>

wo: WO\_314 Airframe - page 1 of 1

  
**KJC Aircraft Services**

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**N245DS**                      **DIAMOND AIRCRAFT IND INC, DA 40, S/N: 40.833**                      **June 15, 2020**  
 Tach: 1403.8

1. Completed Annual Inspection reference FAR 43 appendix D.
2. Complied with annual ELT inspection reference FAR 91.207 (d). No defects noted.

I certify this aircraft has been inspected in accordance with an Annual inspection reference FAR 43 appendix D and was determined to be in an airworthy condition. With respect to the work performed, this airframe is approved for return to service. Details of work performed are on file with KJC Aircraft Services under work order: WO\_314.

Ted Stephens A&P/IA 3288321                      *Ted Stephens*

MAKE: Diamond  
 MODEL: DA40  
 S/N: 40.833  
 REG. NO: N245DS  
 WORK ORDER: 0155



**Premier Aircraft Service, Inc.**

3804 Falcon Way W  
 Hangar 18S  
 Fort Worth, TX 76106  
 Phone: 562.881.5345

DATE: 8/31/2020  
 A/C TSN: 1093.7  
 FLIGHTTIME: 1093.7

**Airframe Entries**

- Performed Annual Inspection using DA40 AMM as a guide.
- Inspected ELT system IAW 14 CFR 91.207(d).
- Complied with 100 Hour lubrication.
- Replaced LH tire and tube
- Replaced nose tire and tube

I certify that this aircraft has been inspected in accordance with an Annual Inspection and a list of discrepancies and unairworthy items has been provided for the aircraft owner or operator.

DATE: 8/31/2020

SIGNED: *[Signature]*

David Seastead, License: AP3492477 IA

Work Order: 0155

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