

154695

AIRCRAFT TECHNICAL RECORD

Section 1. AIRFRAME LOG

AIRCRAFT DATA

- | | |
|---|----------------|
| 1. Nationality & Registration | USA N520RA |
| 2. Manufacturer's Designation
(Make & Model) | DA 62 |
| 3. Manufacturer's Serial
Number | 62.095 |
| 4. Type Approval or
Specification Number | A57CE |
| 5. Date of Manufacture | September 2018 |
| 6. Aircraft Inspection Cycle | |



Section 1: Airframe Log

DATE / /	AIR TIME				LANDINGS / CYCLES		DETAILS OF TASK (INSPECTION, REPAIRS & REPLACEMENT)
	DAILY TOTAL		TOTAL		DAILY TOTAL	TOTAL	
	HRS	MIN	HOURS	MIN			
CARRIED FORWARD							



DIAMOND AIRCRAFT INC.
D.O.T. APPROVED MAINTENANCE
ORGANIZATION 161-93

Registration:	N520RA	AC Serial Number:	62 095
Airframe Total Time:	32.4	Work Order:	SO 071970
Engine LH SN:	E4P-C-00189	Engine RH SN:	E4P-C-00190
Engine LH TT:	32.4	Engine RH TT:	32.4
Prop LH SN:	180779	Prop RH SN:	180780
Prop LH TT:	32.4	Prop RH TT:	32.4

- Aircraft Imported as "N520RA"
- Previous Entries Taken from Factory & Ferry Log
 - Total Production Test Flight Time: 3.16 hrs July 20, 2018 thru August 17, 2018 LOAN
 - Ferry Flight: 28.01 hrs August 23, 2018 thru August 25, 2018 LOAN - CYXU
 - Total Time Brought Forward: 32.4 hrs
- Compass swing performed (information transferred from Original Production Records):
 - Date: August 24, 2018

FOR	N	30	60	E	120	150
STEER	002	033	063	093	121	151
FOR	S	210	240	W	300	330
STEER	181	210	240	271	301	332

- Static Pressure system and Primary Altimeter (G1000) have been inspected and tested in accordance with CAR standard 571, Appendix B and 14 CFR 91.411: Test date below taken from Original Production Records.

<u>Static Pressure System:</u>	<u>Stand By Altimeter:</u>
Test Date: Aug 23, 2018	Test Date: Aug 23, 2018
Next Due: Aug 22, 2020	Next Due: Aug 22, 2020

The Maintenance Described has been performed IAW the Applicable Standard of Airworthiness



OCT 11 2018

Date:

Continued...



DIAMOND AIRCRAFT INC.
D.O.T. APPROVED MAINTENANCE
ORGANIZATION 161-93

Registration:	N520RA	AC Serial Number:	62 095
Airframe Total Time:	32.4	Work Order:	SO 071970

- ATC Transponder & Altitude Reporting System(s) have been tested in Accordance with CAR Standard 571, Appendix F and 14CFR 91.217 & 91.413: Test date below taken from Original Production Record
 - Test Date: August 23, 2018
 - TXPR re-programmed:
 - USA Registration: N520RA
 - Hex Code: A68A66
 - IGRF 2015

Garmin G1000 Installation:

Software Version:	1373 02	FileCharts Expiry:	Out-of-Date
Obstacle Database Expiry:	2018-11-08	SafetyTaxi Expiry:	2018-11-08
Navigation Database Expiry:	2018-10-11	ChartView Expiry:	Out-of-Date
GTX 33 Software Version:	N/A	Aot Directory Expiry:	2018-11-08

- Following limitations as per DA 62 AMM (Doc# 7.02.25) Rev. 1, Chapter 04 - Subject to change with AMM revision, always refer to latest revision

The Maintenance Described has been performed IAW the Applicable Standard of Airworthiness



OCT 11 2018

Date:

Continued...

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DIAMOND AIRCRAFT IND.
D.O.T. APPROVED MAINTENANCE
ORGANIZATION 161-93

Registration:
Airframe Total Time

N520RA
32.4

AC Serial Number: 62 095
Work Order: SO 071970

Certification Maintenance Requirements:

ATA Ch.	Component	Hours	Years	Next Due
51	Bonding System and static discharging system	1000	4	1000 hrs / Aug 22, 2022

Replacement Requirements:

ATA Ch.	Component	Hours	Years	Next Due
24	Emergency battery package	-	2	N/A
24	ECU backup batteries L/R	-	1	Aug 23, 2019
27	Bolt connecting flap push rods to flap bell crank midsection at rear main bulkhead	1000	-	1000 hrs

ELT Installation:

- o Programmed: N520RA
- o ELT Battery Due Date: January 1, 2025
- o ELT S/N: LX1100713742

The Maintenance Described has been performed IAW the Applicable Standard of Airworthiness



OCT 11 2018

Continued...

See replacement entry
next page, due to
error with WTB
info.



DIAMOND AIRCRAFT IND.
D.O.T. APPROVED MAINTENANCE
ORGANIZATION 161-93

Registration: N520RA
Airframe Total Time: 32.4

AC Serial Number: 62 095
Work Order: SO 071970

Import Summary:

- Aircraft Imported with Export Certificate of Airworthiness, No. 2882/18, dated September 03, 2018
- USA Registration Letters "N520RA" installed on fuselage side surface I.A.W. FAR 45.25 (b) (2)
- ELT reprogrammed Hex ID ADC verified for Reg. No. "N520RA"
- ELT function checked I.A.W. CAR 571 appendix G and FAR 91.207 par D.
- Aircraft and documentation inspected for Major Mod's and/or STC's incorporated, none found.
- All applicable Airworthiness Directives, Service Bulletins complied with. See attached report.
- AWD Bi-weekly checked thru 2018-20
- Aircraft and documentation reviewed, aircraft found to be in the same configuration as "Factory W&B Report" dated July 18, 2018.
 - o Current Empty Weight = 1700 kg OR 3747.86 lbs
 - o Current Empty C of G = 2.431 m OR 95.71 in
 - o Max Ramp Weight = 2300 kg OR 5070.63 lbs
 - o Current Useful Load = 600 kg OR 1322.77 lbs
 - o See Current W&B Report and AFM 7.01.25-E, Chapter G

I HEREBY CERTIFY THAT THIS AIRCRAFT CONFORMS TO TYPE
CERTIFICATE: A57CE Revision No. 26 AND IS IN A FIT AND SAFE
STATE FOR FLIGHT

The Maintenance Described has been performed IAW the Applicable Standard of Airworthiness



OCT 11 2018

End

Section 1: Airframe Log

DATE / /	AIR TIME				LANDINGS / CYCLES		DETAILS OF TASK (INSPECTION, REPAIRS & REPLACEMENT)
	DAILY TOTAL		TOTAL		DAILY TOTAL	TOTAL	
	HRS	MIN	HOURS	MIN			
CARRIED FORWARD							



DIAMOND AIRCRAFT IND.
D.O.T. APPROVED MAINTENANCE
ORGANIZATION 181-93

Registration: N520RA
Airframe Total Time: 32.4

AC Serial Number: 62 095
Work Order: SO 071970

Import Summary:

- Aircraft Imported with Export Certificate of Airworthiness, No. 2882/18, dated September 03, 2018
- USA Registration Letters "N520RA" installed on fuselage side surface I.A.W. FAR45.25 (b) (2).
- ELT reprogrammed Hex ID ADC verified for Reg. No. "N520RA"
- ELT function checked I.A.W. CAR 571 appendix G and FAR 91.207 par D.
- Aircraft and documentation inspected for Major Mod's and/or STC's incorporated, none found.
- All applicable Airworthiness Directives, Service Bulletins complied with. See attached report.
- AWD Bi-weekly checked thru 2018-20
- Aircraft and documentation reviewed, aircraft found to be in the same configuration as "Factory W&B Report" dated July 18, 2018.
 - Current Empty Weight = 1705.3 kg OR 3759.54 lbs
 - Current Empty C of G = 2.429 m OR 95.62 in
 - Max Ramp Weight = 2300 kg OR 5070.63 lbs
 - Current Useful Load = 594.7 kg OR 1311.10 lbs
 - See Current W&B Report and AFM 7.01 25-E, Chapter 6.

I HEREBY CERTIFY THAT THIS AIRCRAFT CONFORMS TO TYPE
CERTIFICATE: A57CE Revision No. 26 AND IS IN A FIT AND SAFE
STATE FOR FLIGHT

The Maintenance Described has been performed IAW the Applicable Standard of
Airworthiness



OCT 11 2018

Date

End

I find that the aircraft meets the requirements for the certificate requested and have issued a Standard Airworthiness Certificate Dated 11 Oct 2018. The aircraft shall be maintained in accordance with the manufacturers recommended program.

Ron Sokoloski

Ron Sokoloski DART 068114544

NAME/
SIGNATURELICENCE:
AME or
AMO/ACADIAMOND AIRCRAFT INC.
D.O.T. APPROVED MAINTENANCE
ORGANIZATION 161-93

Registration:	N520RA	AC Serial Number:	62 095
Airframe Total Time:	33.8	Work Order:	SO 071970
Engine LH SN:	E4P-C-00189	Engine RH SN:	E4P-C-00190
Engine LH TT:	33.8	Engine RH TT:	33.8
Prop LH SN:	180779	Prop RH SN:	180780
Prop LH TT:	33.8	Prop RH TT:	33.8

- RH FWD door seal adjusted as required.
- RH propeller governor speed stop adjusted as required.

The Maintenance Described has been performed IAW the Applicable Standard of Airworthiness



Date: OCT 18 2018

DIAMOND AIRCRAFT INC.
D.O.T. APPROVED MAINTENANCE
ORGANIZATION 161-93

Registration:	N520RA	AC Serial Number:	62 095
Airframe Total Time:	34.6	Work Order:	SO 071970
Engine LH SN:	E4P-C-00189	Engine RH SN:	E4P-C-00190
Engine LH TT:	34.6	Engine RH TT:	34.6
Prop LH SN:	180779	Prop RH SN:	180780
Prop LH TT:	34.6	Prop RH TT:	34.6

- LH propeller governor speed stop adjusted as required.
- GDL audio U/S. Found GDL audio wires capped and stowed. Wires 23024A24 and 23025B24 spliced together IAW diamond approved Dwg. # D67-9231-60-02 Rev B. GDL audio function check carried out. Found serviceable.

The Maintenance Described has been performed IAW the Applicable Standard of Airworthiness



Date: OCT 19 2018

Section 1: Airframe Log

DATE / /	AIR TIME				LANDINGS / CYCLES		DETAILS OF TASK (INSPECTION, REPAIRS & REPLACEMENT)
	DAILY TOTAL		TOTAL		DAILY TOTAL	TOTAL	
	HRS	MIN	HOURS	MIN			
CARRIED FORWARD							



ABSOLUTE AERO
 MAINTENANCE
 21889 Skywest Drive, Hayward, CA 94541 • 510 782-6591

AIRFRAME ENTRY

WORK ORDER: 2254 AIRCRAFT: N520RA TACH: 58.8 TTAF: 58.8
 MODEL: Diamond DA 62 S/N: 62.095

DATE: 03/29/2019

Replaced the R/H vent window latch block with new (P/N: 301.25.4115). Added silicone RTV to rear cabin door seal base as needed to make full contact with door frame. All work completed in accordance with the Diamond DA 62 Maintenance Manual. -END

This airframe is approved for return to service, for only the work performed.

Brandon Thompson A&P 3212565

11/13/2019							This aircraft has been the intended flight



ABSOLUTE AERO
 MAINTENANCE
 21889 Skywest Drive, Hayward, CA 94541 • 510 782-6591

AIRFRAME ENTRY

WORK ORDER: 2587 AIRCRAFT: N520RA TACH: 103.0 TTAF: 103.0
 MODEL: Diamond DA 62 S/N: 62.095

DATE: 12/12/2019

Complied with Diamond Factory Campaign FC 62-012 "Improved Lightning Protection Installation" on both engine cowlings and firewalls and submitted execution report. Complied with Diamond MSB62-026 Rev. 0 by installing missing bonding cables. Replaced the following parts with new: EECU batteries (4EA P/N: LC-R127R2P), alternator excitation batteries (2EA P/N: LC-R121R3P), and the L/H aux tank drain valve (P/N: DA4-9028-17-01). Replaced both fuel filters supplied in service kit (P/N: DA42-AE-100KIT). Bled the L/H coolant system and serviced to fill using Zerex G48 pre-mix. Re-sealed the R/H main and nose landing gear hydraulic actuators using the following new parts: (2EA P/N: MS28775-131, X11-0006-039179, X11-0006-402471, X11-0006-402473, X11-0006-01-00.02). Bled and serviced the landing gear hydraulic system. Serviced all oleo struts with nitrogen. Complied with DA 62 AMM Ch. 12 lubrication schedule and anti-corrosion coating checklist. Serviced all wheel bearings. Charged and desulfated main battery and performed capacity test; passed C1: 103.7%. Removed all airframe access panels and covers. Inspected interior and exterior of airframe, wings and empennage. Inspected all flight controls, rigging, stops, angles and all attach points for the wings, engine and landing gear. Performed operational tests of the retractable landing gear in normal and emergency configurations. No defects noted at this time.

I have performed an operational check and inspection on this ELT in accordance with FAR 91.207D and it has been determined to be in an airworthy condition. ELT battery expiration date: 01/2025. Verified AD's current through FAA AD biweekly 2019-25. All work completed in accordance with the Diamond DA 62 Maintenance Manual. -END

I certify that this aircraft has been inspected in accordance with FAR 43 Appendix D (Annual Inspection) and has been determined to be in an airworthy condition.

Brandon Thompson A&P / IA 3212565

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NAME/
SIGNATURELICENCE:
AME or
AMO/ACA

INSPECTED and has been found safe for
1AW Special Flight Permit dated 11/07/2014.

Ed J. Calabrese 3260370

Precision Static Testing Livermore, CA
FAA Certified Repair Station #QJAR856X
PHONE: (925) 449-5904 FAX (925) 449-6081

I certify that the altimeter(s) and static system(s) tests required
by 14 CFR 43.41

91.41
have
43, A
Teste
W/O
Inspe

Form 1A

PILLOT FIRST OFFICER / STAND-BY

Tested in compliance with Appendix E, Part 43, F.A.R. 91.411
Tested to: 204 ft. W.O. #: 18596
Precision Static Testing FAA CRS# QJAR856X

Test Altitude	Scale Error	Friction Error	Encoder Error	Leak Act/Pass	Hysteresis
-1000	0		-1.2		
0	-1.2		0		
500	-1.0		0		
1000	-1.0		0		
1500	-1.0		0		
2000	-2.0		0		
3000	-2.0		0		
4000	-2.0		0		
5000	-3.0		0		
6000	-2.0		0		
8000	-4.0		0		
10000	-5.0		0		
12000	-5.0		0		
14000	-5.0		0		
15000	-6.0		0		
16000	-6.0		0		
18000	-7.0		0		
20000	-8.0		0		
22000			0		
25000					
30000					
35000					
40000					
45000					
50000					

After Effect: 1 Check Pilot Heat: 0

Baro. Scale Error (± 25 ft.)

28.10 -1727 ✓

28.50 -1340 ✓

29.00 -863 ✓

29.50 -392 ✓

29.92 0 ✓

30.50 +531 ✓

30.90 +893 ✓

30.99 +974 ✓

Aircraft # N500RA

Date Tested: 11/15/2014

Technician: JR

Inspector:

Section 1: Airframe Log

DATE / /	AIR TIME				LANDINGS / CYCLES	
	DAILY TOTAL		TOTAL		DAILY TOTAL	TOTAL
	HRS	MIN	HOURS	MIN		
CARRIED FORWARD						

DETAILS OF TASK
(INSPECTION, REPAIRS & REPLACEMENT)



ABSOLUTE AERO

MAINTENANCE

21889 Skywest Drive, Hayward, CA 94541 · 510 782-6591

AIRFRAME ENTRY

WORK ORDER: 2984 AIRCRAFT: N520RA TACH: 163.5 TTAF: 163.5
MODEL: Diamond DA 62 S/N: 62.095

DATE: 12/15/2020

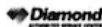
Complied with Diamond Factory Campaign FC 62-010 Rev. 5 by replacement of the data plate and the AFM. Replaced the following parts with new: EECU batteries (4EA P/N: LC-R127R2P), alternator excitation batteries (2EA P/N: LC-R121R3P). Replaced both fuel filters supplied in service kit (P/N: DA42-AE-100KIT). Re-sealed the R/H main and nose landing gear hydraulic actuators using the following new parts: (2EA P/N: MS28775-131, X11-0006-039179, X11-0006-402471, X11-0006-402473, X11-0006-01-00.02). Bled and serviced the landing gear hydraulic system and both brake systems. Complied with DA 62 AMM Ch. 12 lubrication schedule and anti-corrosion coating checklist. Serviced all wheel bearings. Charged and desulfated main battery and performed capacity test; passed C1: 101.2% per Concorde TB-13. Removed all airframe access panels and covers. Inspected interior and exterior of airframe, wings and empennage. Inspected all flight controls, rigging, stops, angles and all attach points for the wings, engine and landing gear. Performed operational tests of the retractable landing gear in normal and emergency configurations. No defects noted at this time. I have performed an operational check and inspection on this ELT in accordance with FAR 91.207D and it has been determined to be in an airworthy condition. ELT battery expiration date: 01/2025. Verified AD's current through FAA AD biweekly 2020-25. All work completed in accordance with the Diamond DA 62 Maintenance Manual. -END

I certify that this aircraft has been inspected in accordance with FAR 43 Appendix D (Annual Inspection) and has been determined to be in an airworthy condition.

Brandon Thompson A&P / IA 3212565

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Take Flight Aviation LLC - 49 Hangar Road - Montgomery, NY 12549 - 8454574188

N520RA
TACH: 271.5

DIAMOND AIRCRAFT INDUSTRIES GM, DA 62, S/N: 62.095

May 03, 2021

1. Performed Annual inspection I/AW AC43-13 Appendix D using Diamond DA62 Aircraft Maintenance Manual as a reference.
2. Aircraft interior and exterior cleaned. Removed engine cowlings and all access panels for inspection.
3. Nose baggage carpets and rear wall removed. Inspected TKS tank & lines, oxygen system & lines, battery compartment & battery, and all lines & electrical connectors/ wiring. Nose baggage door latches inspected and force tested. No defects noted.
4. Hydraulic system components inspected and verified hydraulic fluid level. Reinstalled all carpets and panels in nose compartment.
5. Inspected front doors and rear passenger door. Inspected windows, door hinges, and tested door open warning lights. Replaced LH vent window latch with new.
6. All interior removed for inspection. Inspected all lines, wires, electrical connections, switches, levers and breakers. No defects noted.
7. Inspected seats and seat belts for proper operation. No defects noted.
8. All flight control cables, pulleys, rudder pedals, control rods and control sticks inspected and lubricated.
9. Inspected all systems in rear compartment. RACC system air inlets and outlets, wirings, and mounting inspected.
10. Reinstalled all interior panels and seat assemblies. Verified proper operation of seats belts after interior re-installation.
11. Inspected inside of engine nacelles. Inspected all wiring, connectors, fuel lines, TKS lines, TKS junction blocks, EECU's and wing main attach bolts. No defects noted.
12. Inspected inner and outer flap assemblies, ailerons assemblies, hinges and pushrods. No defects noted.
13. Fuel tanks and fuel interconnecting hoses inspected. All bonding wires inspected. Checked all fuel vents for blockages and proper operation, no blockages found and vents operate normally.
14. Inspected Pitot-static probe and stall warning sensor. No defects noted.
15. Rudder removed for tail inspection. Rudder, rudder hinges, rudder trim tab, rudder gap seal, elevator, elevator push rod, elevator hinges, elevator trim tab, elevator mounting brackets, and elevator mass balance all inspected. No defects noted. Rudder assembly lubricated and reinstalled.
16. Aircraft placed on jacks. All wheel assemblies removed. Removed, cleaned, inspected, repacked and reinstalled all wheel bearings. All tires inspected for wear and proper air pressures verified. Wheel assemblies reinstalled.
17. All gear assemblies inspected. Verified proper nitrogen pressures in all oleo struts. Inspected all gear links, gear doors, gear wells, and all other gear related pieces. Found slight superficial damage to both LH and RH gear doors. No other defects noted.
18. Completed multiple normal gear swings and emergency gear swings. All operations normal. Aircraft removed from jacks.
19. Main battery removed, tested, charged and reinstalled.
20. ELT inspected I/AW FAR 91.207(d), battery replacement due 01/2022.
21. All access panels reinstalled and reinstalled engine cowlings.
22. All systems checked for proper operation, no defects noted.
23. All other routine service items performed.
24. Verified AD compliance through this date.
25. Removed RH and LH brake linings with new. Installed (8) 066-15500 - Brake, Lining.
26. Removed and replaced tail bonding cable with new as required. Installed (1) stock - bonding strap material.

With respect to the work performed, this airframe is approved for return to service. Details of work performed are on file with Take Flight Aviation LLC under work order: WO_794.

James T. Markey IA AP3166872IA



Take Flight Aviation LLC - 49 Hangar Road - Montgomery, NY 12549 - 8454574188

N520RA
Tach: 315.5

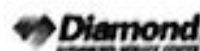
DIAMOND AIRCRAFT INDUSTRIES GM, DA 62, S/N: 62.095

July 10, 2021

1. Low coolant annunciator activated. Topped off coolant as required.
2. Removed and replaced broken bonding cable on nose gear with new unit as required.

I certify this aircraft was inspected in accordance with an Annual Inspection, this airframe is determined Airworthy and is approved for return to service. Details of work performed are on file with Take Flight Aviation LLC under work order: WO_916.

James T. Markey IA AP3166872IA



Take Flight Aviation LLC - 49 Hanger Road - Montgomery, NY 12549 - 8454574188

N520RA
Hobbs: 229.3DIAMOND AIRCRAFT INDUSTRIES GM, DA 62, S/N: 62.095
Tach: 374.4

August 18, 2021

1. Performed Annual Inspection I/A/W 14 CFR part 43 Appendix D using Diamond DA62 checklist and Aircraft Maintenance Manual reference.
2. Aircraft interior and exterior cleaned. Removed engine cowlings and all access panels for inspection.
3. Nose baggage carpets and rear wall removed. Inspected TKS tank & lines, oxygen system & lines, battery compartment & battery all lines & electrical connectors/ wiring. Nose baggage door latches inspected and force tested. No defects noted.
4. Hydraulic system components inspected and verified hydraulic fluid level. Reinstalled all carpets and panels in nose compartment.
5. Inspected front doors and rear passenger door. Inspected windows, door hinges, and tested door open warning lights. Replaced window latch with new.
6. All interior removed for inspection. Inspected all lines, wires, electrical connections, switches, levers and breakers. No defects noted.
7. Inspected seats and seat belts for proper operation. No defects noted.
8. All flight control cables, pulleys, rudder pedals, control rods and control sticks inspected and lubricated.
9. Inspected all systems in rear compartment. RACC system air inlets and outlets, wirings, and mounting inspected.
10. Reinstalled all interior panels and seat assemblies. Verified proper operation of seats belts after interior re-installation.
11. Inspected inside of engine nacelles. Inspected all wiring, connectors, fuel lines, TKS lines, TKS junction blocks, EECU's and attach bolts. No defects noted.
12. Inspected inner and outer flap assemblies, ailerons assemblies, hinges and pushrods. No defects noted.
13. Fuel tanks and fuel interconnecting hoses inspected. All bonding wires inspected. Checked all fuel vents for blockages and operation, no blockages found and vents operate normally.
14. Inspected Pitot-static probe and stall warning sensor. No defects noted.
15. Rudder removed for tail inspection. Rudder, rudder hinges, rudder trim tab, rudder gap seal, elevator, elevator push rod, elevator trim tab, elevator mounting brackets, and elevator mass balance all inspected. No defects noted. Rudder assembly lubricated and reinstalled.
16. Aircraft placed on jacks. All wheel assemblies removed. Removed, cleaned, inspected, repacked and reinstalled all wheel bearings. Tires inspected for wear and proper air pressures verified. Wheel assemblies reinstalled.
17. All gear assemblies inspected. Verified proper nitrogen pressures in all oleo struts. Inspected all gear links, gear doors, gear boots, all other gear related pieces. Found slight superficial damage to both LH and RH gear doors. No other defects noted.
18. Completed multiple normal gear swings and emergency gear swings. All operations normal. Aircraft removed from jacks.
19. Main battery removed, tested, charged and reinstalled.
20. ELT inspected I/A/W FAR 91.207(d), battery replacement due 01/2022.
21. All access panels reinstalled and reinstalled engine cowlings.
22. All systems checked for proper operation, no defects noted.
23. All other routine service items performed.
24. Verified AD compliance through this date.
25. Removed RH brake linings with new. Installed (4) P/N 066-15500 - Brake, Lining.
26. Removed and replaced worn R/H brake pads and (1) broken shim with new units as required.

I certify this aircraft was inspected in accordance with an Annual Inspection, this airframe is determined Airworthy and is approved for service. Details of work performed are on file with Take Flight Aviation LLC under work order: WO_911.

James T. Markey IA AP3166872IA



Take Flight Aviation LLC - 49 Hanger Road - Montgomery, NY 12549 - 8454574188

N520RA
Tach: 428.5

January 13, 2022

1. Removed and replaced worn R/H tire and tube with new units as required. Installed P/N 6.00-6 - Tire, Installed P/N 6.00-6 - Tube
2. Serviced L/H and R/H struts with nitrogen as required.
3. Installed new shim for R/H brake caliper as required. Installed P/N 06-01197 - Brake Shim.

With respect to the work performed, I certify that this airframe has been determined airworthy and is approved for return to service. Details of work performed are on file with Take Flight Aviation LLC under work order: WO_1069.

James T. Markey IA AP3166872IA

Registration #: N520RA
Manufacturer: Diamond Aircraft Industries



BLUE LINE
TECHNICAL SERVICES

TACH: 516.60
HOEBS: 439.20
A/C Total Time: 516.60
Aircraft Serial No: 62.095
Date: 09/07/2022

NCE:
Eor
/ACA

Part/Model No: Diamond DA62
Work Order No: 534

- Annual Inspection. Inspected ELT per 91.207(D), battery expires 01/2025. Serviced aircraft battery and box. Greased & lubed wheel bearings and landing gear. Performed landing gear swing, good at this time. Performed ground run; ops check normal. Checked all ADs for compliance. I certify this aircraft has been inspected IAW an Annual Inspection per FAR 43 App. D and Diamond AMM and was determined to be in an airworthy condition.
- ECU batteries replaced with new at this time 4 ea (P/N: NP7-12).
- Installed new brake linings P/N-066-15500 on LH and RH brake assy.
- Repaired dome nut and aft right nacelle panel.
- Installed new fuel sump P/N-CAV-180. Ops check normal; no leaks detected.

THE AIRCRAFT, AIRFRAME, ENGINE, PROPELLER, OR APPLIANCE IDENTIFIED ABOVE WAS REPAIRED AND/OR INSPECTED IN ACCORDANCE WITH BLUE LINE TECHNICAL SERVICES LLC AND CURRENT MAINTENANCE RULES OF THE FEDERAL AVIATION REGULATIONS AND IS APPROVED WITH RESPECT TO WORK PERFORMED AT THIS TIME IN RETURN TO SERVICE.

Pertinent details of maintenance are held in this Maintenance Facility under Work Order No 534 dated .

Date: 9/07/2022 Signature: *Namh C. Potts*

Work Order: 534

AP Number: 3352118JA

PTK-9488-08-2023 (08-21-2023)

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MAKE: Diamond Aircraft Ind
MODEL: DA62
S/N: 62.095
REG. NO: N520RA



Waterford Aviation, Inc.
6548 Highland Rd
Suite 900
Waterford, MI 48327

W/O #: PTK-9488-08-2023
DATE: 08-21-2023
A/C TT: 641.1
A/C Tach: 641.1

Airframe Entries

- Replaced RH main tire and tube with new, P/N 606C6-8 and 092-500-0 respectively. Inflated with dry shop air, leak check good. Work done in reference to Diamond DA62 AMM 32-40.

DATE: 08-21-2023

SIGNED: *Sean Farrelly*

Sean Farrelly
A&P Number: 3890041

WORK ORDER: PTK-9488-08-2023
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Section 1: Airframe Log

Registration #: N520RA
Manufacturer: Diamond Aircraft Industries
Part/Model No: Diamond DA62
Work Order No: 1843



BLUE LINE
TECHNICAL SERVICES

TACH: 646.40
HOBBS: 603.60
A/C Total Time: 646.40
Aircraft Serial No: 62.095
Date: 10/07/2023

- Annual inspection. Inspected ELT per 91.207(d), battery expires JAN 2025. Jacked aircraft, removed wheels, cleaned bearings, repacked bearings, and reinstalled wheels. Performed landing gear swing, good at this time. Performed 200hr airframe servicing items. Ground run and ops check good. Checked all ADs for compliance. I certify this aircraft has been inspected IAW an Annual inspection per FAR 43 App. D and Diamond AMM and was determined to be in an airworthy condition.
- ECU batteries replaced with new at this time 4 ea (P/N: NP7-12). Next due October 2024.
- Replaced LH and RH fuel cap protectors with new.
- Installed new plug in RH control stick.
- Serviced oxygen system with aviator's breathing oxygen.
- Replaced RH nose baggage door spring with new (P/N: D60-5231-52-00).
- Replaced LH most forward coolant hose with new (P/N: DS HC-1-35-0235). Leak check good.
- Removed bird nest from LH engine firewall and cleaned area around it.
- Replaced LH and RH aux fuel tank sumps with new (P/N: CAV-180). Leak check good.
- Replaced LH step grip tape with new.
- Replaced RH wing outboard vent tubing with new.
- Replaced 1 retaining circlip on LH landing gear folding stay with new (P/N: DIN471A-10X1-A2).
- Replaced LH fuel cap cable with new (P/N: D67-2817-31-00).

THE AIRCRAFT, AIRFRAME, ENGINE, PROPELLER, OR APPLIANCE IDENTIFIED ABOVE WAS REPAIRED AND/OR INSPECTED IN ACCORDANCE WITH BLUE LINE TECHNICAL SERVICES LLC AND CURRENT MAINTENANCE RULES OF THE FEDERAL AVIATION REGULATIONS AND IS APPROVED WITH RESPECT TO WORK PERFORMED AT THIS TIME IN RETURN TO SERVICE.

Pertinent details of maintenance are held in this Maintenance Facility under Work Order No 1843 dated .

Date: 10/07/2023 Signature: *Rachel Weisandt* Work Order: 1843
AP Number: *AMP38892701A*



1817 Aviation Dr.
Wilmington, NC 28405
United States

Telephone: 910-505-9508
Email: ILMMX@modern-aviation.com

Registration #: N520RA
Manufacturer: DIAMOND AIRCRAFT IND INC
Part/Model number: DA-62
Work Order No: NCRS-15476
Total AC Time:
Hour Meter:
Aircraft Serial Number: 62.095
Date: 03/08/2024
Total AC Cycles:

Squawk

- 1.2 REMOVED L/H MAIN WHEEL ASSEMBLY. DISASSEMBLED MAIN WHEEL. UPON INSPECTION OF WHEEL ASSEMBLY DURING DISSASSEMBLY, NOTED BRAKE ROTOR CRACKED IN SEVERAL PLACES. REPLACED BRAKE ROTOR WITH NEW P.N. 164-25700. REMOVED TIRE P.N. 606C86-6 S.N. 12920269 AND INNER TUBE. INSTALLED NEW INNER TUBE AND TIRE P.N. 606C86-6 S.N. 20250111 ONTO WHEEL ASSEMBLY. CLEANED, INSPECTED, LUBRICATED WHEEL BEARINGS. REINSTALLED L/H WHEEL ASSEMBLY. ALL WORK DONE IAW DIAMOND DA62 AMM 32-40-00.
- 1.3 SERVICED MAIN AND NOSE TIRES TO 55 PSI (MAIN) AND 45 PSI (NOSE) PER DIAMOND DA62 AMM

The aircraft, airframe, appliance, or article identified in Work Order NCRS-15476 was repaired and inspected in accordance with the current Regulations of the Federal Aviation Administration and is airworthy with respect to the maintenance, preventive maintenance, or alterations as described in the customer work order. Pertinent details of the maintenance actions are on file at this repair station under the above Work Order.

Signed *[Signature]*
(Signature of Authorized Representative)
for Modern Aviation

A&P # *2822299*

Date *3/8/2024*

NAME/
SIGNATURELICENCE:
AME or
AMO/ACA

D&D Design, Inc
CRS R58R222Y
23 Hollybrook Road
Paramus, NJ 07652
Phone (973-615-3856)

The ATC Transponder Test and Inspections Required
by FAR 91.413 were performed this date and found
to comply with FAR 43, Appendix F.

Aircraft Make: Don Model: DA 62 S/N: 62095 Reg: N520RA

Transponder

Make/Model Cessna 61X 3X5 S/N 112 Aircraft

Make/Model S/N

Details of this inspection are on file at this repair station under.

Work Order 1476 Date: 10/16/2024

[Signature]
Signature

The Altimeter and Static system tests required by
FAR 91.411 were performed this date and found
To comply with FAR 43 Appendix E. Altimeter
Was tested to: 20,000 feet on 10/16/2024
Signature: [Signature]
D&D Avionics
CRS R58R222Y MAIN # 5730

Section 1: Airframe Log

Airframe (Annual) - page 1



Take Flight Aviation LLC - 49 Hangar Road - Montgomery, NY 12549 - 8454574188

N520RA
Hobbs: 765.4

Diamond, DA62NG, S/N: 62.095
Tach: 764.7

October 25, 2024

1. Performed Annual inspection I/A/W 14 CFR part 43 Appendix D using Diamond DA62 checklist and Aircraft Maintenance Manual as a reference.
2. Aircraft interior and exterior cleaned. Removed engine cowlings and all access panels for inspection. Installed P/N Brake Cleaner - Brake Cleaner.
3. Nose baggage carpets and rear wall removed. Inspected TKS tank & lines, oxygen system & lines, battery compartment, battery, and all lines & electrical connectors/ wiring. Nose baggage door latches inspected and force tested. No defects noted.
4. Hydraulic system components inspected and verified hydraulic fluid level. Reinstalled all carpets and panels in nose compartment.
5. Inspected front doors and rear passenger door. Inspected windows, door hinges, and tested door open warning lights.
6. All interior removed for inspection. Inspected all lines, wires, electrical connections, switches, levers and breakers. No defects noted.
7. Inspected seats and seat belts for proper operation. No defects noted.
8. All flight control cables, pulleys, rudder pedals, control rods and control sticks inspected and lubricated. Installed P/N 09-26102 - LPS2.
9. Inspected all systems in rear compartment. RACC system air inlets and outlets, wirings, and mounting inspected.
10. Reinstalled all interior panels and seat assemblies. Verified proper operation of seats belts after interior re-installation.
11. Inspected inside of engine nacelles. Inspected all wiring, connectors, fuel lines, TKS lines, TKS junction blocks, EECUs and wing main attach bolts. No defects noted.
12. Inspected inner and outer flap assemblies, ailerons assemblies, hinges and pushrods. No defects noted.
13. Fuel tanks and fuel interconnecting hoses inspected. All bonding wires inspected. Checked all fuel vents for blockages and proper operation, no blockages found and vents operate normally.
14. Inspected Pilot-static probe and stall warning sensor. No defects noted.
15. Rudder removed for tail inspection. Rudder, rudder hinges, rudder trim tab, rudder gap seal, elevator, elevator push rod, elevator hinges, elevator trim tab, elevator mounting brackets, and elevator mass balance inspected as required. No defects noted. Rudder assembly lubricated and reinstalled as required.
16. Aircraft placed on jacks. All wheel assemblies removed. Removed, cleaned, inspected, repacked and reinstalled all wheel bearings. All tires inspected for wear and proper air pressures verified. Wheel assemblies reinstalled as required.
17. All gear assemblies inspected. Verified proper nitrogen pressures in all oleo struts. Inspected all gear links, gear doors, gear wells, and all other gear related pieces as required.
18. Completed multiple normal gear swings and emergency gear swings. All operations normal. Aircraft removed from jacks.
19. Main battery removed, tested, charged and reinstalled.
20. ELT inspected I/A/W FAR 91.207(d). Battery Exp: 01/2025.
21. All access panels reinstalled and reinstalled engine cowlings.
22. All systems checked for proper operation, no defects noted.
23. All other routine service items performed.
24. Checked applicable AD's bi-weekly thru this date.
25. Troubleshoot the fuel indication system, found the outboard fuel level transducer to not be functioning properly. Removed wing, removed the fuel tanks, installed the outboard sensor, reinstalled the tank and re-installed wing as required. Flushed fuel tanks to remove contamination and moisture. Flushed fuel lines going from RH and LH tanks to engine. Removed contamination and recommend to customer to watch for contamination in RH wing. Installed P/N D60-2817-14-00_1-ASY - DA62 Fuel Probe Assy -Short, Installed P/N WK724-3 - Fuel filter.
26. Ground run aircraft and found LH fuel quantity indication not working. Removed wing, trouble shot and found inboard sensor failed. Removed and replaced inboard fuel sensor with new. Re-installed wing on aircraft as required. Installed P/N D64-2817-14-00-ASY - Fuel Probe Assy, Installed P/N DIN3771-128X5.3 - O-Ring Rev/Lot: RC2004910, Installed (6) P/N 15400032 - Oetiker Clamp Rev/Lot: RC2006372.
27. Re-attached Hydraulic line shield in LH gear well as required.
28. Repaired clear coat on aircraft nose and wings as required.
29. Repaired degraded paint on cabin entry wing walks as required.
30. Cleaned, prepped and re-painted pilots wing walk, aircraft nose and several spots on aircraft fuselage as required.
31. Cleaned excessive glue from Co-Pilots window around inset window as required.
32. Cleaned nose gear hydraulic actuator and inspected for leak with no leakage noted.

I certify that this airframe was inspected in accordance with an Annual Inspection at Take Flight Aviation, LLC., and that this airframe has been determined airworthy and approved for return to service.

James T. Markey IA 3166872

James T. Markey

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TOTALS

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