

AIRCRAFT TECHNICAL LOGS

Section 2. RECORD OF INSTALLATIONS & MODIFICATIONS TO AIRCRAFT

AIRFRAME LOG

1. Nationality and Registration N236TS
2. Manufacturer's Designation DA 42
3. Record of
 - (a) Engine Installations
 - (b) Propeller Installations
 - (c) Airworthiness Directives (A/D)
 - (d) Service Bulletins (S/B)
 - (e) Special Inspections (S/I)
 - (f) Modifications (MODS)

RECORD OF ENGINE &

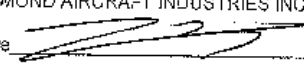
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REMARKS	REASON FOR CHANGE	SIGNATURE	LICENCE NUMBER
INSTALLED NEW ON DA 42 S/N 42.ACO22		[Signature]	DA Q 42
EW ON DA 42 S/N 42.ACO22		[Signature]	DA Q 42
EW ON DA 42 S/N 42.ACO22		[Signature]	DA Q 42
EW ON DA 42 S/N 42.ACO22		[Signature]	DA Q 42
AIRFRAME LOG ENTRY BY MODERN AERO. PROP FOR REPAIRS TSN: 74.2.		[Signature]	DA Q 42
BY MODERN AERO. REF. AIRFRAME LOG BOOK ENTRY BY MODERN AERO.		[Signature]	DA Q 42
MODERN AERO @ TACH 101.0 PROP TSN: 117.1 REF AIRFRAME LOG ENTRY		[Signature]	DA Q 42
INSTALLED BY MODERN AERO. PROP TSN: 74.2 @ TACH TIME 101.0 HRS.		[Signature]	DA Q 42
REMOVED FOR CONVERSION FROM "A" TO "R" FLANGE @ TACH TIME 411.6 HRS.		[Signature]	DA Q 42
REMOVED FOR CONVERSION FROM "A" TO "R" FLANGE @ TACH TIME 411.6 HRS.		[Signature]	DA Q 42
REMOVED THIS DATE TO FACILITATE INSTALLATION OF AUSTRO ENGINE.		[Signature]	DA Q 42
REMOVED THIS DATE TO FACILITATE INSTALLATION OF AUSTRO ENGINE		[Signature]	DA Q 42
AUSTRO ENGINE INSTALLED I.A.W. DSB 42-068/1		[Signature]	DA Q 42
AUSTRO ENGINE INSTALLED I.A.W. 05842-068/1		[Signature]	DA Q 42
OVERHAULED PROP WITH SI NO. 48C EMBODIED, INSTALLED THIS DATE		[Signature]	DA Q 42
OVERHAULED PROP WITH SI NO. 48C EMBODIED, INSTALLED THIS DATE		[Signature]	DA Q 42

RECORD OF AIRFRAME

AIRWORTHINESS DIRECTIVES (A/D), SERVICE BULLETINS (S/B),

DATE	A/D,	S/B,	S/I,	MODS	DETAILS OF
					 Date: 01 DECEMBER, 2006 S/N: 42.AC022 Reg: N236TS TTAF: 5.1 HRS Engine LH S/N: 02-01-0830 Engine RH S/N: 02-01-0834 Propeller LH S/N: 06446 Propeller RH S/N: 06447 The following S/B and S/I have been carried out as applicable: DAI-A AD D-2005-145 - Thielert Software m2.7 - C/W DAI-A AD D-2005-229/SI42-007 - Engine, Exchange of the clutch disk only if Engine or Clutch has been replaced - N/A DAI-A AD D-2005-001 R1/MSB 42-005 - Issuance of a TR to AFM for one Eng - N/A DAI-A MSB 42-008/1 - Exchange of safety walk on wing stubs - N/A DAI-A MSB 42-007 - Software for TAE Engine, approved version - C/W ver m2.7 DAI-A MSB 42-008/3 - Software for Garmin G1000 - C/W 370-14 installed DAI-A MSB 42-010/1 - Relocation of Config Module, KCM 100 - N/A DAI-A MSB 42-016/1 - Installation improved breather line ATA-Code:71-00 - C/W DAI-A MSB 42-017 - Oil Lines ATA-Code:79-00 - C/W DAI-A MSB 42-019/4 - Exchange of Aux Fuel Tank Filter - C/W DAI-A MSB 42-021 - Inspection of clearance of exhaust pipe - C/W DAI-A MSB 42-024/3 (EASA-AD: 2006-0277)-Install Prop System valve bracket -C/W DAI-A MSB 42-027 - Engine replacement requires engine control harness Replacement(at next engine change/replacement) - N/A DAI-A OSB 42-001/2 - Possible retrofit, installation of design changes - N/A DAI-A OSB 42-009 - Installation of two additional hinges to forward cargo doors - N/A DAI-A OSB 42-013 - Installation of Auxiliary Fuel Tank, ATA-Code:28-00 - Incorporating Mfg. DAI-A OSB 42-014/4 - Increase of maximum Take Off Mass - C/W DAI-A OSB 42-015/2 - Installation of ice protection system for operation under known icing conditions ATA-Code:30-00 - Incorporating during Mfg. DAI-A OSB 42-018 - Installation of WX-500 Stormscope - N/A DAI-A OSB 42-019 - Recommended Temporary deact of Aux Fuel Tank - NCW TAE SB TM TAE 125-0001,R1 - Engine Lifetime of 1000 Flight Hours/12 years - Due at 1000 HRS TAE SB TM TAE 125-0002,R3 - Each 300 Flight Hours; Inspection of Gearbox, Gearbox oil and filter, Engine oil and filter - Due after each 300 flying hours TAE SB TM TAE 125-0003,R6 - Oil pressure sensor, prevention of damages - FPCW TAE SB TM TAE 125-0004,R4 - New version of firmware and mapping - FPCW TAE SB TM TAE 125-0005 - Conversion to compression 18:1 - N/A by S/N TAE SB TM TAE 125-0006,R4 - Current level of firmware, mapping compression ratio 18:1 - See TM TAE 125-0004,R4 TAE SB TM TAE 125-0007,R5 - Cooling, prevention of electrochemical corrosion - FPCW TAE SB TM TAE 125-0008,R3 - Function of Alternator in case of a failure of the electrical aircraft power supply - N/A by Alt. P/N TAE SB TM TAE 125-0009,R1 - Screw Retention - Bearing Shield High Pressure Pump - N/A by Pump P/N TAE SB TM TAE 125-0010 - Airworthiness Limitation Section, Operation & Maintenance Manual - N/A as New A/C, Due at 100 HRS TAE SB TM TAE 125-0011,R3 - Exchange of the clutch disk - N/A TAE SB TM TAE 125-0012,R1 - Customer furnished parts - C/W during Mfg. TAE SB TM TAE 125-0013,R1 - Gearbox oil filter - C/W TAE SB TM TAE 125-0015,R2 - Aluminum Pipe Combined Pump - Module Block - C/W TAE SB TM TAE 125-0016 - Adapter Catchtank for Turbocharger - C/W MT-Propeller SB 1AB - Time between Overhaul of Propellers, Governors and Oil-Accumulators (TBO) 1500 HRS/72 Months - See SB For Approved Time limits/schedule, information only. MT-Propeller SB 1BJ - List of MT-Propeller installations - N/A by M/N of A/C BI-weekly AWD check carried out to current revision 2006-25 The maintenance described above has been performed in accordance with the applicable standards of airworthiness. DIAMOND AIRCRAFT INDUSTRIES INC. D.O.T. APPROVAL
					Signature  Lic or Stamp 
					1785 kg Take-off Mass Temporary Revision to DA 42 S/N 42.AC022 AMM, A

SPECIAL INSPECTIONS (S/I) AND MODIFICATIONS (MODS)

WORK OR INSPECTION PERFORMED

SIGNATURE

LICENCE
NUMBER

M-TR-MAM-42-088 1785kg Take-off Mass - see attached →

DA
Q.42

TEMPORARY REVISION

AMM-TR-MÄM-42-088

1785 kg Take-off Mass

This Temporary Revision AMM-TR-MÄM-42-088 is approved in conjunction with the Mandatory Design Change Advisories MÄM 42-088 and MÄM 42-102 and is valid in conjunction with the Airplane Maintenance Manual (AMM) until this Temporary Revision has been incorporated into the AMM.

The limitations and information contained herein either supplement or, in the case of conflict, override those in the AMM.

The technical information contained in this document has been approved under the authority of DOA No. EASA.21J.052.

Doc. No.	Section	Affected Pages
7.02.01	08-10-00	7a

Instruction

- › Print this document single-sided on yellow paper.
- › Insert this cover page as the first page of the AMM.
- › Insert the other page of this Temporary Revision in front of the corresponding AMM page.

WEIGHING REPORT

Model: DA 42 Serial Number: _____ Registration: _____

Data with reference to the Type Certificate Data Sheet and the Airplane Flight Manual.

Reference Plane: Vertical plane 2196 mm (86.46 in) in front of the leading edge of wing at the root rib.

Horizontal reference line: Front baggage compartment floor, left side.

Equipment Inventory - dated: _____ Cause for Weighing: _____

Weight and Balance Calculations (Weighing at the wheels)

Weight-Condition: Include brake fluid, hydraulic fluid, coolant, engine oil and unusable fuel (7.57 liters/2 US gal.)

Support	Gross	Tare	Net	Lever Arm
MAIN G _{1LH}				X _{1LH} = 2780 mm (109.45 in.)
MAIN G _{1RH}				X _{1RH} = 2780 mm (109.45 in.)
NOSE G ₂				X ₂ = 925 mm (36.42 in.)
Empty Weight				

Calculate the Empty Weight, $G = \text{MAIN } G_{1LH} + \text{MAIN } G_{1RH} + \text{NOSE } G_2$.		G =
Calculate the Empty Weight Moment, $M = (G_{1LH} * X_{1LH}) + (G_{1RH} * X_{1RH}) + (G_2 * X_2)$.		M =
Calculate the Empty Weight Center-of-Gravity position, $X_{CG} = M/G$.		X _{CG} =
% Maximum permitted all-up-weight:	MAM 42-088 not carried out	1700 kg (3748 lb.)
% Max AUW.	MAM 42-088 carried out	1785 kg (3935 lb.)
Maximum useful load = Max AUW - G.		

Record the Empty Weight (G) and the Empty-Weight Moment (M) in the Airplane Flight Manual.

Place/Date	Authorizing Stamp	Authorizing Signature
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Figure 4: Weighing Report for Mechanical Scales Under the Wheels

RECORD OF AIRFRAME AIRWORTHINESS DIRECTIVES (A/D), SERVICE BULLETINS (S/B),

DATE	A/D, S/B, S/I, MODS	DETAILS OF
Dec 12, 2006	 Date: December 12, 2006 WO#: RO-06-330 S/N: 42.AC022 Reg #: N236TS TTAF: 5.1 Hrs The following work carried out by Diamond Aircraft Industries Inc. Service Center Department. MSB 42-030 check on return fuel line on common rail and banjo fitting Clearance complied with during production of the A/C. Ref. RW2006-386. 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 <u><i>[Signature]</i></u> Lic. Or Stamp 	



MODERN AERO, INC
14801 PIONEER TRAIL
EDEN PRAIRIE, MN 55347
952-941-2595

FAA APPROVED REPAIR STATION MZER198L

N236TS
AIRFRAME

DATE: 1/2/07
DIAMOND DA-42

ACTI: 14.4
S/N 40.AC022

REMOVED REAR SEAT. REMOVED L/H AFT SEAT BRACKET.
INSTALLED 3 NEW P/N LN-29910-M6 NUT PLATES ON SEAT BRACKET.
INSTALLED L/H SEAT BRACKET. INSTALLED REAR SEAT. REFERENCE
MODERN AERO W/O # 34799

KEN FISCHBACH *[Signature]*



AVIONICS OF MODERN AERO, INC
14801 PIONEER TRAIL
EDEN PRAIRIE, MN 55347
952-941-2595

FAA APPROVED REPAIR STATION 05VR353Y

N236TS

DATE: 12/29/2006

TOTAL: 14.4

Performed minor alteration, installed Garmin GDL69A and GA55 XM Satellite
Radio data link receiver system. Weight and balance and equipment list
revised this date.

Avionics of Modern Aero, Inc

Eden Prairie, MN 55347

CNS 05VR 353Y

W/O# 4934

[Signature] Frank Nook

SPECIAL

WORK OR

1. Approving National Aviation Authority/Country: FAA/United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG		3. Form Tracking Number: 230153	
4. Organization Name and Address: GARMIN. 2345 Turner Road, SE Salem, OR 97302, USA		5. Work Order/Contract/Invoice Number: 687018			
6. Item	7. Description:	8. Part Number:	9. Eligibility:	10. Quantity:	11. Serial/Batch Numbers:
1	GDL69A	011-00987-00	N/A	1	47755256
12. Status/Work:					NEW
13. Remarks:					

AIRWORTHINESS APPROVAL

14. Certifies that the items identified above were manufactured in conformity to: ☒ Approved design data and are in a condition for safe operation ☐ Non-approved design data specified in Block 13.		19. ☐ 14 CFR-43.9 Return to Service ☐ Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 12, 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 routine service.	
15. Authorized Signature: <i>Forrest Green</i>		20. Authorized Signature:	
16. Approval/Authorization No.: ODARF636441NM		21. Approval/Certificate No.:	
17. Name (Typed or Printed): Horner Owens		22. Name (Typed or Printed): 23. Date:	
18. Date: 11/02/2006			

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)

* Installer must cross-check eligibility with applicable technical data

NSN: 0052-00-012-9005

RECORD OF AIRFRAME AIRWORTHINESS DIRECTIVES (A/D), SERVICE BULLETINS (S/B),

DATE	A/D,	S/B,	S/I,	MODS	DETAILS OF
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Date: November 20, 2012

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

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 - 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 return 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 010-00670-05 (WAAS Equipped).
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_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.
MSB42NG-018/1 - Replacement of turbo connector Assy. C/W
OSB42NG-019 - Installation of fuel Pressure Pulsation damper C/W. as part of W/ OSB42-068 Rev. 14.
MSB42NG-024 - Repair of upper center wing skin to spar bond C/W. (FAA AD 2012-17-07. EASA AD 2011-0100).
OSB42NG-024 - Removal of the LH safety rope on both Engines CW
OSB42NG-025 - Installation of a heating inlet scoop C/W.
MSB42NG-026 - Replacement of the MLG damper Nut C/W.
OSB42NG-029 - Installation of the fire protection patches on Cowl Nacelles C/W.
RSB42NG-030 - Replacement of the Air Conditioning system. N/A as Aircraft is not AC Equipped.
OSB42NG-032 - N/A as Aircraft not equipped with Oxygen system.
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.
SI 42NG-039 - Induction System - Abnormal/Emergency Procedure. AFM updated with Supplement SO3 Rev.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 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 as new Fuel pumps per MSB-E4-009/2 are installed.

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

Signature: *[Signature]*

Lic or Stamp:

