



European Aviation Safety Agency

EASA

**TYPE-CERTIFICATE
DATA SHEET**

EASA 005

DA 42

Diamond Aircraft Industries GmbH

N-A-Otto-Strasse 5
A-2700 Wiener Neustadt
Austria

For models: DA 42
DA 42 M
DA 42 NG
DA 42 M-NG

Issue 24: 25 April 2014

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SECTION A: DA 42

A.I. General

- | | |
|------------------------------------|---|
| 1. Data Sheet No.: | EASA.A.005 |
| 2. a) Type: | DA 42 |
| b) Model: | DA 42 |
| c) Variant: | -- |
| 3. Airworthiness Category: | JAR-23 Normal Category |
| 4. Type Certificate Holder: | DIAMOND AIRCRAFT INDUSTRIES GMBH
N.A. OTTO-STR. 5
A-2700 WIENER NEUSTADT
AUSTRIA |
| 5. Manufacturer: | DIAMOND AIRCRAFT INDUSTRIES GMBH
N.A. OTTO-STR. 5
A-2700 WIENER NEUSTADT
AUSTRIA

DIAMOND AIRCRAFT INDUSTRIES INC.
1560 CRUMLIN SIDEROAD, LONDON ONTARIO
N5V 1S2
CANADA |
| 6. Certification Application Date: | 02-Apr-2002
(JAA Certification Application Date) |
| 7. (Reserved) | N/A |
| 8. (Reserved) | N/A |

A.II. EASA Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | 02-Apr-2002 |
| 2. Airworthiness Requirements: | JAR-23, Amendment 1, issued 01 February 2001
JAR-1, Change 5, issued 15-Jul-1996 |
| 3. Special Conditions: | CRI D-02 Variable Elevator Stop
CRI E-02 Use of Jet Fuel for Reciprocating Engines
CRI E-03 Use of Diesel Fuel for Reciprocating Engines
CRI E-06 Engine Vibration Level |

- | | | |
|------------------------------------|----------|---|
| | CRI E-07 | Engine Torque |
| | CRI F-01 | Protection from the Effects of HIRF |
| | CRI F-03 | Protection from the Effects of Lightning Strikes, Indirect Effects |
| | CRI F07 | Human Factors in Integrated Avionic System |
| 3. Exemptions: | | None |
| 4. Deviations: | | None |
| 5. Equivalent Safety Findings: | CRI D-01 | Single Lever Power Control |
| | CRI E-04 | Liquid Cooling – Coolant Tank |
| | CRI E-05 | Electronically-controlled Reciprocating Diesel Engine |
| | CRI E-08 | Fuel System – Hot Fuel Temperature |
| | CRI F-04 | Power plant Instruments |
| | CRI B-03 | Stall Speed in Icing Conditions |
| 6. Requirements elected to comply: | | None |
| 7. Environmental Standards: | | ICAO, Annex 16, Volume 1, Third Edition, 1993, Amdt. 7
JAR 36, issued 23-May-1997
CRI A-03 for additional national requirements
See Note 2 |
| 8. (Reserved) | | N/A |
| 9. (Reserved) | | N/A |

A.III. Technical Characteristics and Operational Limitations

- | | | | |
|----------------------------|--|----------------------|--------------|
| 1. Type Design Definition: | Current issue of Doc. No. 7.07.00, Chapter 7 including Design Changes MÄM 42-001 to 42-012 and following | | |
| 2. Description: | Twin engine, four-seated cantilever low wing airplane, composite construction, retractable tricycle landing gear, T-tail | | |
| 3. Equipment: | Equipment list, AFM, Doc. No. 7.01.05, Section 6, See Note 3 | | |
| 4. Dimensions: | Span | 13.42 m | (44 ft 0 in) |
| | Length | 8.56 m | (28 ft 1 in) |
| | Height | 2.49 m | (8 ft 2 in) |
| | Wing Area | 16.29 m ² | (175.3 sqft) |
| 5. Engine: | | | |

- 5.1.1 Model: 2 Technify Motors GmbH TAE 125-01 or TAE 125-02-99
see Note 4
- 5.1.2 Type Certificate: EASA Engine Type Certificate Data Sheet E.055
- 5.1.3 Limitations: Max take-off rotational speed 2300 r.p.m.
Max continuous rotational speed 2300 r.p.m
(Propeller shaft r.p.m)
For power-plants limits refer to AFM, Doc. No. 7.01.05
or Doc. No. 7.01.06, Section 2
- 5.1.4 Firmware: see DAI MSB 42-007 See Note 4
- 5.1.5 Mapping: see DAI MSB 42-007 See Note 4
6. Load factors: at v_A at v_{NE} with flaps in T/O
or LDG position
- | | | | |
|-----------|-------|-----|-----|
| Positive: | 3.8 | 3.8 | 2.0 |
| Negative | -1.52 | 0 | |
7. Propeller:
- 7.1 Model: 2 MT-Propeller MTV-6-A-C-F/CF187-129
- 7.2 Type Certificate: EASA Prop. Type Certificate Data Sheet P.094
- 7.3 Number of blades: 3
- 7.4 Diameter: 1870 mm
- 7.5 Sense of Rotation: CW
- 7.6 Setting: Low pitch setting 12 °
Feather position 81 °
Start Lock 15°
8. Fluids:
- 8.1 Fuel: Jet A-1 (ASTM 1655) see Note 8
Diesel (EN 590) see Note 7
- 8.2 Oil: Engine Shell Helix Ultra 5W30 synthetic API SJ/CF
or see AFM, Doc. No. 7.01.05, Section 2
Gearbox Shell EP 75W90 API GL-4
or see AFM, Doc. No. 7.01.05, Section 2
- 8.3 Coolant: Water / Cooler Protection
for more details see AFM, 7.01.05, Section 2
- 8.4 Ice Protection Fluids: AL-5 (DTD 406B) or Aeroshell Compound 07
for more details see AFM, 7.01.05, Suppl. S03
9. Fluid capacities:

9.1 Fuel:	Standard Fuel Tank	
	Total:	196.8 liters 52 US Gallons
	Usable:	189.2 liters 50 US Gallons
	Auxiliary Fuel Tank	
	Total:	104 liters 27,4 US Gallons
	Usable:	100 liters 26,4 US Gallons
9.2 Oil: each engine	Maximum:	6.0 liters 6.3 qts
	Minimum:	4.5 liters 4.8 qts
9.3 Coolant system capacity:	Approx. 7 Liter	
10. Air Speeds:	Design Manoeuvring Speed v_A	
	up to 1542 kg	119 KEAS
	above 1542 kg	125 KEAS
	Flap Extended Speed v_{FE}	
	Approach	135 KEAS
	Landing	110 KEAS
	Maximum Landing Gear Operation Speed v_{LO}	155 KEAS
	Maximum Landing Gear Extended Speed v_{LE}	192 KEAS
	Minimum Control Speed v_{MC}	68 KEAS
	Maximum structural cruising speed v_{NO} (= Maximum structural design speed v_C)	155 KEAS
	Never exceed speed v_{NE}	192 KEAS
11. Maximum Operating Altitude:	5486 m (18 000 ft)	
12. Allweather Operations Capability:	Day/Night-VFR, IFR Flights into known or forecast icing conditions See Note 5	
13. Maximum Weights:		
	Take-off	1700 kg (3748 lb) 1785 kg (3935 lb) MÄM 42-088 installed
	Zero Fuel	1650 kg (3638 lb) 1674 kg (3690 lb) OÄM 42-188 installed 1730 kg (3814 lb) OÄM 42-188 & -195 installed
	Landing	1700 kg (3748 lb) 1785 kg (3935 lb) OÄM 42-195 installed
	For approved Weight Configurations see Note 6	

14. Centre of Gravity Range

Forward limit	Up to 1468 kg	2.35 m behind Datum
	At 1785 kg	2.40 m behind Datum
	Varying linearly with mass in between	
Rear limit	At 1250 kg	2.42 m behind Datum
	At 1600 kg and above	2.49 m behind Datum
	Varying linearly with mass in between	

15. Datum: 2.196 m in front of leading edge of stub-wing at the wing joint

16. Control surface deflections:

Aileron	trailing edge up	25°	± 2°
	trailing edge down	15°	+ 2° - 0°
Elevator	trailing edge up	15.5°	± 0.5°
	trailing edge down	13°	± 1°
Elevator Trim Tab	nose up at elevator 10° up	+ 17°	± 5°
	nose down at elevator 10° up	- 35°	± 5°
Rudder	left	27°	± 1°
	right	29°	± 1°
Rudder Trim Tab	trim RH at rudder 20° LH	+ 34°	± 5°
	trim LH at rudder 20° LH	+ 18°	± 5°
Flaps	Cruise flap setting	0°	+ 2° - 0°
	Approach flap setting	20°	+ 4° - 2°
	Landing flap setting	42°	+ 3° - 1°

17. Levelling Means: floor of front baggage compartment levelled

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger Seating Capacity: 3

20. Baggage/Cargo Compartments:	Location	max. allowable Load
	Front Baggage Compartment	30 kg (66 lb)
	Behind Rear Seats	45 kg (100 lb)
	Aft part of Baggage Extension	18 kg (40 lb)
	Whole aft Baggage Compartment together	45 kg (100 lbs)

21. Wheels and Tyres: Nose Wheel Tyre Size 5.00 – 5
Main Wheel Tyre Size 15x6.0–6

22. (Reserved): N/A

A.IV. Operating and Service Instructions

1. Flight Manual: Document No. 7.01.05 or 7.01.06 (with OÄM 42-102, GFC 700 Autopilot)
2. Technical Manual: Airplane Maintenance Manual (AMM) Document No. 7.02.01 (incl. Airworthiness Limitations) Service Information and Service Bulletins
3. Spare Parts Catalogue: Document No. 7.03.01
4. Instruments and aggregates: refer to AMM Doc. No. 7.02.01 Chapter 1

A.V. Notes:

1. This certification applies to serial numbers 42.004 and subsequent for production at Diamond-Austria, serial numbers 42.AC001 and subsequent for production at Diamond-Canada, excluding serial numbers 42L.001 and 42L.002.
2. Approved Noise Levels in accordance to the EASA data sheet for noise TCDSN A.005.
3. For approved software versions of Gamin G1000 Integrated Avionic System see DAI MSB 42-008, at latest issue. If engine TAE 125-02-99 is installed (Design Change MÄM 42-198), than Garmin Software PNo. 010-00370-15 or later approved version is required.
4. Approved engine model for installation in the DA 42: TAE 125-01, 125-01-(017)-(), TAE 125-02-99, 125-02-(0003)-(). The approved firmware and mapping is according to DAI MSB 42-007 at latest issue. Installation of engine types in pairs only. The engine TAE 125-02-99 engine was previously approved as TAE 125-02. Engine retrofit installation from engine TAE 125-01 to TAE 125-02-99 is approved by Design Change MÄM 42-198 with OSB 42-046.
5. Flights into known or forecast icing conditions is approved if the liquid fluid ice protection system in accordance to Major Design Change OÄM 42-054 is installed.
6. The following Design Mass Configurations are approved:

Design Changes installed	Standard	MÄM 42-088	MÄM 42-088 and OÄM 42-188	MÄM 42-088 and OÄM 42-188 and OÄM 42-195
MTOM	1700 kg (3748 lb)	1785 kg (3935 lb)	1785 kg (3935 lb)	1785 kg (3935 lb)
MZFM	1650 kg (3638 lb)	1650 kg (3638 lb)	1674 kg (3690 lb)	1730 kg (3814 lb)
MLM	1700 kg (3748 lb)	1700 kg (3748 lb)	1700 kg (3748 lb)	1785 kg (3935 lb)

MTOM – maximum take-off mass; MZFM – maximum zero fuel mass; MLM – maximum landing mass

The retrofit installation of the design changes is **only** approved per TC Holder Service Bulletins.

7. The use of Diesel fuel (EN 590) is approved if Major Design Change MÄM 42-037 is installed.
8. For additional approved Jet Fuel specifications see AFM Section 2.

SECTION B: DA 42 M

B.I. General

- | | |
|------------------------------------|---|
| 1. Data Sheet No.: | EASA.A.005 |
| 2. a) Type: | DA 42 |
| b) Model: | DA 42 M |
| c) Variant: | -- |
| 3. Airworthiness Category: | JAR 23 Normal Category |
| 4. Type Certificate Holder: | DIAMOND AIRCRAFT INDUSTRIES GMBH
N.A. OTTO-STR. 5
A-2700 WIENER NEUSTADT
AUSTRIA |
| 5. Manufacturer: | DIAMOND AIRCRAFT INDUSTRIES GMBH
N.A. OTTO-STR. 5
A-2700 WIENER NEUSTADT
AUSTRIA |
| 6. Certification Application Date: | 01-Jun-2006 |
| 7. (Reserved) | N/A |
| 8. (Reserved) | N/A |

B.II. EASA Certification Basis

- | | |
|--|--|
| 1. Reference Date for determining the applicable requirements: | 02-Apr-2002 |
| 2. Airworthiness Requirements: | JAR-23, Amendment 1, issued 01 February 2001
JAR-1, Change 5, issued 15-Jul-1996 |
| 3. Special Conditions: | CRI D-02 Variable Elevator Stop
CRI E-02 Use of Jet Fuel for Reciprocating Engines
CRI E-03 Use of Diesel Fuel for Reciprocating Engines
CRI E-06 Engine Vibration Level
CRI E-07 Engine Torque
CRI F-01 Protection from the Effects of HIRF
CRI F-03 Protection from the Effects of Lightning Strikes, Indirect Effects
CRI F-07 Human Factors in Integrated Avionic |

	System
3. Exemptions:	None
4. Deviations:	None
5. Equivalent Safety Findings:	CRI D-01 Single Lever Power Control CRI E-04 Liquid Cooling – Coolant Tank CRI E-05 Electronically-controlled Reciprocating Diesel Engine CRI E-08 Fuel System – Hot Fuel Temperature CRI F-04 Power plant Instruments CRI B-03 Stall Speed in Icing Conditions
6. Requirements elected to comply:	None
7. Environmental Standards:	ICAO, Annex 16, Volume 1, Third Edition, 1993, Amdt. 7 JAR 36, issued 23-May-1997 CRI A-03 for additional national requirements See Note 2
8. (Reserved)	N/A
9. (Reserved)	N/A

B.III. Technical Characteristics and Operational Limitations

1. Type Design Definition:	Current issue of Doc. No. 7.07.00, Chapter 7 including Design Changes MÄM 42-001 to 42-012 and following												
2. Description:	Twin engine, four-seated cantilever low wing airplane, composite construction, retractable tricycle landing gear, T-tail The airplane is equipped with provisions for installation of various mission options.												
3. Equipment:	Equipment list, AFM, Doc. No. 7.01.05, Section 6, and AFM Supplement M00 See Note 7												
4. Dimensions:	<table border="0"> <tr> <td>Span</td> <td>13.42 m</td> <td>(44 ft 0 in)</td> </tr> <tr> <td>Length</td> <td>8.56 m</td> <td>(28 ft 1 in)</td> </tr> <tr> <td>Height</td> <td>2.49 m</td> <td>(8 ft 2 in)</td> </tr> <tr> <td>Wing Area</td> <td>16.29 m²</td> <td>(175.3 sqft)</td> </tr> </table>	Span	13.42 m	(44 ft 0 in)	Length	8.56 m	(28 ft 1 in)	Height	2.49 m	(8 ft 2 in)	Wing Area	16.29 m ²	(175.3 sqft)
Span	13.42 m	(44 ft 0 in)											
Length	8.56 m	(28 ft 1 in)											
Height	2.49 m	(8 ft 2 in)											
Wing Area	16.29 m ²	(175.3 sqft)											
5. Engine:													
5.1.1 Model:	2 Technify Motors GmbH TAE 125-02-99												
5.1.2 Type Certificate:	EASA Engine Type Certificate Data Sheet E.055												

- 5.1.3 Limitations: Max take-off rotational speed 2300 r.p.m.
Max continuous rotational speed 2300 r.p.m
(Propeller shaft r.p.m)
For power-plants limits refer to AFM, Doc. No. 7.01.05
or Doc. No. 7.01.06, Section 2
- 5.1.4 Firmware: see DAI MSB 42-007 See Note 3
- 5.1.5 Mapping: see DAI MSB 42-007 See Note 3
6. Load factors: at v_A at v_{NE} with flaps in T/O
or LDG position
- | | | | |
|-----------|-------|-----|-----|
| Positive: | 3.8 | 3.8 | 2.0 |
| Negative | -1.52 | 0 | |
7. Propeller:
- 7.1 Model: 2 MT-Propeller MTV-6-A-C-F/CF187-129
- 7.2 Type Certificate: EASA Prop. Type Certificate Data Sheet P.094
- 7.3 Number of blades: 3
- 7.4 Diameter: 1870 mm
- 7.5 Sense of Rotation: CW
- 7.6 Settings: Low pitch setting: 12 °
Feather position: 81 °
Start Lock: 15°
8. Fluids:
- 8.1 Fuel: Jet A-1 (ASTM 1655) see Note 6
Diesel (EN 590) see Note 5
- 8.2 Oil: Engine: Shell Helix Ultra 5W30 synthetic API SJ/CF
or see AFM, Doc. No. 7.01.05, Section 2
Gearbox: Shell EP 75W90 API GL-4
or see AFM, Doc. No. 7.01.05, Section 2
- 8.3 Coolant: Water / Cooler Protection
for more details see AFM, 7.01.05, Section 2
- 8.4 Ice Protection Fluids: AL-5 (DTD 406B) or Aeroshell Compound 07
for more details see AFM, 7.01.05, Suppl. S03
9. Fluid capacities:
- 9.1 Fuel: Standard Fuel Tank
- | | | |
|---------|--------------|---------------|
| Total: | 196.8 liters | 52 US Gallons |
| Usable: | 189.2 liters | 50 US Gallons |
- Auxiliary Fuel Tank
- | | | |
|---------|------------|-----------------|
| Total: | 104 liters | 27,4 US Gallons |
| Usable: | 100 liters | 26,4 US Gallons |

9.2	Oil: each engine	Maximum: 6.0 liters Minimum: 4.5 liters	6.3 qts 4.8 qts
9.3	Coolant system capacity:	Approx. 7 liters	
10.	Air Speeds:	Design Manoeuvring Speed v_A up to 1542 kg above 1542 kg Flap Extended Speed v_{FE} Approach Landing Maximum Landing Gear Operation Speed v_{LO} Maximum Landing Gear Extended Speed v_{LE} Minimum Control Speed v_{MC} Maximum structural cruising speed v_{NO} (= Maximum structural design speed v_C) Never exceed speed v_{NE}	 119 KEAS 125 KEAS 135 KEAS 110 KEAS 155 KEAS 192 KEAS 68 KEAS 155 KEAS 192 KEAS
11.	Maximum Operating Altitude:	5486 m (18 000 ft)	
12.	Allweather Operations Capability:	Day/Night-VFR, IFR Flights into known or forecast icing conditions See Note 4	
13.	Maximum Weights:	Take-off Zero Fuel Landing For approved Weight Configurations see Note 8	
14.	Centre of Gravity Range:	Forward limit Up to 1468 kg At 1785 kg Rear limit At 1250 kg At 1600 kg and above	 2.35 m behind Datum 2.40 m behind Datum Varying linearly with mass in between 2.42 m behind Datum 2.49 m behind Datum Varying linearly with mass in between

15. Datum: 2.196 m in front of leading edge of stub-wing at the wing joint
16. Control surface deflections:
- | | | | |
|-------------------|------------------------------|-------|-----------|
| Aileron | trailing edge up | 25° | ± 2° |
| | trailing edge down | 15° | + 2/-0° |
| Elevator | railing edge up | 15.5° | ± 0.5° |
| | trailing edge down | 13° | ± 1° |
| Elevator Trim Tab | nose up at elevator 10° up | + 17° | ± 5° |
| | nose down at elevator 10° up | - 35° | ± 5° |
| Rudder | left | 27° | ± 1° |
| | right | 29° | ± 1° |
| Rudder Trim Tab | trim RH at rudder 20° LH | + 34° | ± 5° |
| | trim LH at rudder 20° LH | + 18° | ± 5° |
| Flaps | Cruise flap setting | 0° | + 2° - 0° |
| | Approach flap setting | 20° | + 4° - 2° |
| | Landing flap setting | 42° | + 3° - 1° |
17. Levelling Means: floor of front baggage compartment levelled
18. Minimum Flight Crew: 1 (Pilot)
19. Maximum Passenger Seating Capacity: 3
20. Baggage/Cargo Compartments:
- | Location | max. allowable Load |
|--|---------------------|
| Front Baggage Compartment | 30 kg (66 lb) |
| Behind Rear Seats | 45 kg (100 lb) |
| Aft part of Baggage Extension | 18 kg (40 lb) |
| Whole aft Baggage Compartment together | 45 kg (100 lbs) |
21. Wheels and Tyres: Nose Wheel Tyre Size 5.00 – 5
Main Wheel Tyre Size 15x6.0–6
22. (Reserved): N/A

B.IV. Operating and Service Instructions

1. Flight Manual: Document No. 7.01.05 or 7.01.06 (with OÄM 42-102, GFC 700 Autopilot), including AFM Supplement M00
2. Technical Manual: Airplane Maintenance Manual (AMM) Document No. 7.02.01 (incl. Airworthiness Limitations) Service Information and Service Bulletins
3. Spare Parts Catalogue: Document No. 7.03.01

4. Instruments and aggregates: refer to AMM Doc. No. 7.02.01 Chapter 1

B.V. Notes:

1. This certification applies to serial numbers 42.005, 42.008, 42.157, 42.177, 42.191, 42.234, 42.247, 42.255, 42.262, 42.272, 42.282, 42.286, 42.293, 42.304, 42.319, 42.328 and serial number 42.M001 and subsequent . All of these serial numbers initially delivered as a DA42 must be modified with Optional Service Bulletin OSB42-056 to comply with the DA42M type design.
2. For approved software versions of Garmin G1000 Integrated Avionic System see DAI MSB 42-008, at latest issue. Garmin Software PNo. 010-00370-15 or later approved version is required.
3. Approved engine model for installation in the DA 42 M:
TAE 125-02-99 125-02-(0003)-()
The approved firmware and mapping is according to DAI MSB 42-007 at latest issue.
4. Flights into known or forecast icing conditions is approved if the liquid fluid ice protection system in accordance to Major Design Change OÄM 42-054 is installed.
5. The use of Diesel fuel (EN 590) is approved if Major Design Change MÄM 42-037 is installed.
6. For additional approved Jet Fuel specifications see AFM Section 2.
7. The basic DA42 M does not include provisions for specific mission purposes. The specific type design for mission equipment and its installations are not part of the DA42 M certification; this is approved only in accordance to EASA TCDS A.513
8. The following Design Mass Configurations are approved:

Design Changes installed	Standard	MÄM 42-088 and OÄM 42-188	MÄM 42-088 and OÄM 42-188 and OÄM 42-195
MTOM	1785 kg (3935 lb)	1785 kg (3935 lb)	1785 kg (3935 lb)
MZFM	1650 kg (3638 lb)	1674 kg (3690 lb)	1730 kg (3814 lb)
MLM	1700 kg (3748 lb)	1700 kg (3748 lb)	1785 kg (3935 lb)

MTOM – maximum take-off mass; MZFM – maximum zero fuel mass; MLM – maximum landing mass
The retrofit installation of the design changes is **only** approved per TC Holder Service Bulletins.

SECTION C: DA 42 NG

C.I. General

- | | |
|------------------------------------|---|
| 1. Data Sheet No.: | EASA.A.005 |
| 2. a) Type: | DA 42 |
| b) Model: | DA 42 NG |
| c) Variant: | -- |
| 3. Airworthiness Category: | JAR 23 Normal Category |
| 4. Type Certificate Holder: | DIAMOND AIRCRAFT INDUSTRIES GMBH
N.A. OTTO-STR. 5
A-2700 WIENER NEUSTADT
AUSTRIA |
| 5. Manufacturer: | DIAMOND AIRCRAFT INDUSTRIES GMBH
N.A. OTTO-STR. 5
A-2700 WIENER NEUSTADT
AUSTRIA

DIAMOND AIRCRAFT INDUSTRIES INC.
1560 CRUMLIN SIDEROAD, LONDON ONTARIO
N5V 1S2
CANADA |
| 6. Certification Application Date: | 17-Jan-2008 |
| 7. (Reserved) | N/A |
| 8. (Reserved) | N/A |

C.II. EASA Certification Basis

- | | |
|--|--|
| 1. Reference Date for determining the applicable requirements: | 02-Apr-2002 |
| 2. Airworthiness Requirements: | JAR-23, Amendment 1, issued 01-Feb-2001
JAR-1, Change 5, issued 15-Jul-1996 |
| 3. Special Conditions: | CRI D-02 Variable Elevator Stop
CRI E-02 Use of Jet Fuel for Reciprocating Engines
CRI E-03 Use of Diesel Fuel for Reciprocating Engines
CRI E-04 Liquid Cooling – Coolant Tank |

- CRI E-05 Electronically-controlled Reciprocating Diesel Engine
 - CRI E-06 Engine Vibration Level
 - CRI E-07 Engine Torque
 - CRI F-01 Protection from the Effects of HIRF
 - CRI F-03 Protection from the Effects of Lightning Strikes, Indirect Effects
 - CRI F-04 Power plant Instruments
 - CRI F-07 Human Factors in Integrated Avionic System
3. Exemptions: None
4. Deviations: None
5. Equivalent Safety Findings: CRI E-10 Electrical Fuel Pump
6. Requirements elected to comply: CS 23.1507 (CS 23/0)
CS 23.49 (CS 23/1)
CS 23.562 (CS 23/1)
7. Environmental Standards: ICAO, Annex 16, Volume 1, Part II and as implemented in Decision No. 2003/4/RM amended by Decision 2007/007/R of The Executive Director of the Agency dated 2 April 2007, on certification specifications providing for acceptable means of compliance for aircraft noise
CS-36, Amendment 1
see Note 2
8. (Reserved) N/A
9. (Reserved) N/A

C.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Current issue of Doc. No. 7.07.00, Chapter V004/7 including Design Changes VÄM 42-004, MÄM 42-313, MÄM 42-316 to 318, 42-322, 42-325 and following
2. Description: Twin engine, four-seated cantilever low wing airplane, composite construction, retractable tricycle landing gear, T-tail
3. Equipment: Equipment list, AFM, Section 6, see Note 3
4. Dimensions:
- | | | |
|-----------|----------------------|--------------|
| Span | 13.42 m | (44 ft 0 in) |
| Length | 8.56 m | (28 ft 1 in) |
| Height | 2.49 m | (8 ft 2 in) |
| Wing Area | 16.29 m ² | (175.3 sqft) |

5. Engine:

- 5.1.1 Model: 2 Austro Engine E4 see Note 4
- 5.1.2 Type Certificate: EASA Engine Type Certificate Data Sheet E.200
- 5.1.3 Limitations: Max take-off rotational speed (5 min.) 2300 r.p.m.
Max continuous rotational speed 2100 r.p.m
(Propeller shaft r.p.m)
with MÄM 42-600 installed 2300 r.p.m
Max T/O Power (5min) 100% (123,5 kW)
Max. continuous Power 92% (114 kW)
For power-plants limits refer to AFM, Section 2
- 5.1.4 Firmware: see DAI MSB 42NG-002 See Note 4
- 5.1.5 Mapping: see DAI MSB 42NG-002 See Note 4

6. Load factors: at v_A at v_{NE} with flaps in T/O or LDG position
- | | | | |
|-----------|-------|-----|-----|
| Positive: | 3.8 | 3.8 | 2.0 |
| Negative | -1.52 | 0 | |

7. Propeller:

- 7.1 Model: 2 MT-Propeller MTV-6-R-C-F/CF187-129 or
2 MT-Propeller MTV-6-R-C-F/CF 190-69 see Note 8
- 7.2 Type Certificate: EASA Prop. Type Certificate Data Sheet P.094
See note 5
- 7.3 Number of blades: 3
- 7.4 Diameter: 1870 mm or 1900 mm (MÄM 42-600)
- 7.5 Sense of Rotation: CW
- 7.6 Settings: Low pitch setting 12°
13° (MÄM 42-600)
Feather position: 81°
80° (MÄM 42-600)
Start Lock: 15°

8. Fluids:

- 8.1 Fuel: Jet A-1 (ASTM 1655), see note 7
Diesel (EN590), see note 11
- 8.2 Oil: Engine: Shell Helix Ultra 5W30 or 5W40
or see AFM, Section 2
Gearbox: Shell SPIRAX GSX 75W-80 or
Shell SPIRAX S6 GXME 75W-80
or see AFM, Section 2
- 8.3 Coolant: Water / Cooler Protection

for more details see AFM, Section 2

8.4 Ice Protection Fluids: AL-5 (DTD 406B) or Aeroshell Compound 07
for more details see AFM, Suppl. S03

9. Fluid capacities:

9.1 Fuel:

Standard Fuel Tank

Total: 196.8 liters 52 US Gallons

Usable: 189.2 liters 50 US Gallons

Auxiliary Fuel Tank

Total: 104 liters 27,4 US Gallons

Usable: 100 liters 26,4 US Gallons

9.2 Oil: each engine

Maximum: 7 liters

Minimum: 5 liters

9.3 Coolant system
capacity:

Approx. 7 liters

9. Air Speeds:

Design Manoeuvring Speed v_A

up to 1700 kg 114 KEAS

1701 to 1800 kg 121 KEAS

above 1800 kg 125 KEAS

Flap Extended Speed v_{FE}

Approach 135 KEAS

Landing 110 KEAS

Maximum Landing Gear Operation Speed v_{LO}

155 KEAS

Maximum Landing Gear Extended Speed v_{LE}

192 KEAS

Minimum Control Speed Airborne v_{MCA} 75 KEAS

MÄM 42-600 70 KEAS

Maximum structural cruising speed v_{NO}

(= Maximum structural design speed v_C) 155 KEAS

Never exceed speed v_{NE} 192 KEAS

11. Maximum Operating
Altitude:

5486 m (18 000 ft)

12. Allweather Operations
Capability:

Day/Night-VFR, IFR

Flights into known or forecast icing conditions

See Note 6

13. Maximum Weights:

See Note 12

Take-off

1900 kg (4189 lb)

If MÄM 42-678 is installed

1999 kg (4407 lb)

Zero Fuel

1765 kg (3891 lb)

If MÄM 42-659 is installed

1835 kg (4045 lb)

Landing		1805 kg (3979 lb)
	If MÄM 42-659 is installed	1999 kg (4407 lb)
14. Centre of Gravity	Forward limit	
Range:	At 1450 kg	2.350 m behind Datum
	At 1468 kg	2.350 m behind Datum
	At 1900 kg	2.418 m behind Datum
	If MÄM 42-678 is installed	
	At 1999 kg	2.434 m behind Datum
	Varying linearly with mass in between	
	Rear limit	
	At 1450 kg	2.454 m behind Datum
	At 1700 kg and above	2.480 m behind Datum
	Varying linearly with mass in between	
	If OÄM 42-199 is installed (see note 10):	
	For all weights	2.450 m behind Datum
	If OÄM 42-199 and MÄM 42-600 are installed: (see note 10)	
	At 1450 kg	2.454 m behind Datum
	At 1510 kg and above	2.460 m behind Datum
15. Datum:	2.196 m in front of leading edge of stub-wing at the wing joint	
16. Control surface	deflections:	
Aileron	trailing edge up	25° ± 2°
	trailing edge down	15° +2/-0°
Elevator	trailing edge up	15.5° ± 0.5°
	trailing edge down	13° ± 1°
Elevator Trim Tab	nose up at elevator 10° up	+ 17° ± 5°
	nose down at elevator 10° up	- 35° ± 5°
Rudder	left	27° ± 1°
	right	29° ± 1°
Rudder Trim Tab	trim RH at rudder 20° LH	+ 54° ± 5°
	trim LH at rudder 20° LH	+ 22° ± 5°
	trim RH at rudder 20° LH (MÄM 42-600)	+ 35° ± 5°
	trim LH at rudder 20° LH (MÄM 42-600)	+ 36° ± 5°
Flaps	Cruise flap setting	0° + 2° - 0°
	Approach flap setting	20° + 4° - 2°
	Landing flap setting	42° +3° - 1°
17. Levelling Means:	floor of front baggage compartment levelled	
18. Minimum Flight Crew:	1 (Pilot)	

19. Maximum Passenger Seating Capacity: 3
20. Baggage/Cargo Compartments:
- | Location | max. allowable Load |
|--|---------------------|
| Front Baggage Compartment | 30 kg (66 lb) |
| Behind Rear Seats | 45 kg (100 lb) |
| Aft part of Baggage Extension | 18 kg (40 lb) |
| Whole aft Baggage Compartment together | 45 kg (100 lbs) |
21. Wheels and Tyres:
- | | |
|----------------------|---------------------|
| Nose Wheel Tyre Size | 5.00 – 5 |
| Main Wheel Tyre Size | 15x6.0–6 see Note 9 |
22. (Reserved): N/A

C.IV. Operating and Service Instructions

5. Flight Manual: Document No. 7.01.15 or 7.01.16 (MÄM 42-600 installed)
6. Technical Manual: Airplane Maintenance Manual (AMM) Document No. 7.02.15 (incl. Airworthiness Limitations) Service Information and Service Bulletins
7. Spare Parts Catalogue (IPC): Document No. 7.03.15
8. Instruments and aggregates: refer to AMM Doc. No. 7.02.15 Chapter 1

C.V. Notes:

1. This certification applies to serial numbers 42.339, 42.379, 42.N001 and subsequent for production at Diamond-Austria, 42.NC001 and subsequent for production at Diamond-Canada. DA42 may be converted to Model DA 42 NG by DAI approved SB OSB 42-068.
2. Approved Noise Levels in accordance to the EASA data sheet for noise TCDSN A.005.
3. For approved software versions of Gamin G1000 Integrated Avionic System see DAI MSB 42NG-003, at latest issue. Garmin Software PNo. 010-00670-01 or later approved version is required.
4. Approved engine model for installation in the DA 42 NG: E4-B
with MÄM 42-600 installed : E4-C
The approved firmware and mapping is according to DAI MSB 42NG-002 at latest issue.
5. Propeller Equipment: Governor P-877-16

6. Fights into known or forecast icing conditions is approved if the liquid fluid ice protection system in accordance to Major Design Change OÄM 42-160 is installed.
7. For additional approved Jet Fuel specifications see AFM Section 2.
8. The installation of Propeller MTV-6-R-C-F/CF 190-69 is only approved by complete installation of design change MÄM 42-600 which includes a number of different modifications.
9. Only specific brand names and types of tires are allowed for installation, see AMM and IPC
10. The Variable Elevator Stop is removed with OÄM 42-199 installed.
11. Operation with Diesel fuel is only approved if OÄM 42-251.
12. The following Design Mass Configurations are approved:

Design Changes installed	Standard	MÄM 42-659	MÄM 42-659 and MÄM 42-678	MÄM 42-659 and MÄM 42-678 and OÄM 42-260
MTOM	1900 kg (4189 lb)	1900 kg (4189 lb)	1999 kg (4407 lb)	2001 kg (4411 lb)
MZFM	1765 kg (3891 lb)	1835 kg (4045 lb)	1835 kg (4045 lb)	1835 kg (4045 lb)
MLM	1805 kg (3979 lb)	1900 kg (4189 lb)	1999 kg (4407 lb)	1999 kg (4407 lb)

MTOM – maximum take-off mass; MZFM – maximum zero fuel mass; MLM – maximum landing mass

The retrofit installation of the design changes is only approved per TC Holder Service Bulletins.

The Maximum Take Off Mass of 2001 kg (4411 lb) per OÄM 42-260 is intended only for cases where it is operationally more suitable to have a MTOM above 2000 kg. The forward Center of Gravity Limit at MTOM 2001 kg (4407 lb) is 2.434 m (95.83 in) aft of datum plane.

SECTION D: DA 42 M-NG

D.I. General

- | | |
|------------------------------------|---|
| 1. Data Sheet No.: | EASA.A.005 |
| 2. a) Type: | DA 42 |
| b) Model: | DA 42 M-NG |
| c) Variant: | -- |
| 3. Airworthiness Category: | JAR 23 Normal Category |
| 4. Type Certificate Holder: | DIAMOND AIRCRAFT INDUSTRIES GMBH
N.A. OTTO-STR. 5
A-2700 WIENER NEUSTADT
AUSTRIA |
| 5. Manufacturer: | DIAMOND AIRCRAFT INDUSTRIES GMBH
N.A. OTTO-STR. 5
A-2700 WIENER NEUSTADT
AUSTRIA |
| 6. Certification Application Date: | 12-Nov-2008 |
| 7. (Reserved) | N/A |
| 8. (Reserved) | N/A |

D.II. EASA Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | 02-Apr-2002 |
| 2. Airworthiness Requirements: | JAR-23, Amendment 1, issued 01-Feb-2001
JAR-1, Change 5, issued 15-Jul-1996 |
| 3. Special Conditions: | CRI D-02 Variable Elevator Stop
CRI E-02 Use of Jet Fuel for Reciprocating Engines
CRI E-03 Use of Diesel Fuel for Reciprocating Engines
CRI E-04 Liquid Cooling – Coolant Tank
CRI E-05 Electronically-controlled Reciprocating Diesel Engine
CRI E-06 Engine Vibration Level
CRI E-07 Engine Torque
CRI F-01 Protection from the Effects of HIRF |

	CRI F-03	Protection from the Effects of Lightning Strikes, Indirect Effects
	CRI F-04	Power plant Instruments
	CRI F-07	Human Factors in Integrated Avionic System
3. Exemptions:		None
4. Deviations:		None
5. Equivalent Safety Findings:	CRI E-10	Electrical Fuel Pump
6. Requirements elected to comply:	CS 23.1507 (CS 23/0) CS 23.49 (CS 23/1) CS 23.562 (CS 23/1)	
7. Environmental Standards:	ICAO, Annex 16, Volume 1, Part II and as implemented in Decision No. 2003/4/RM amended by Decision 2007/007/R of The Executive Director of the Agency dated 2 April 2007, on certification specifications providing for acceptable means of compliance for aircraft noise CS-36, Amendment 1 see Note 2	
8. (Reserved)		N/A
9. (Reserved)		N/A

D.III. Technical Characteristics and Operational Limitations

1. Type Design Definition:	Current issue of Doc. No. 7.07.00, Chapter V005/7 including Design Changes VÄM 42-004 and VÄM 42-005		
2. Description:	Twin engine, four-seated cantilever low wing airplane, composite construction, retractable tricycle landing gear, T-tail The airplane is equipped with provisions for installation of various mission options.		
3. Equipment:	Equipment list, AFM, Doc. No. 7.01.15, Section 6, and AFM Supplement M00 See Notes 3 and 7		
4. Dimensions:	Span	13.42 m	(44 ft 0 in)
	Length	8.56 m	(28 ft 1 in)
	Height	2.49 m	(8 ft 2 in)
	Wing Area	16.29 m ²	(175.3 sqft)

5. Engine:

- 5.1.1 Model: 2 Austroengine E4 see Note 4
- 5.1.2 Type Certificate: EASA Engine Type Certificate Data Sheet E.200
- 5.1.3 Limitations: Max take-off rotational speed (5 min.) 2300 r.p.m.
Max continuous rotational speed 2100 r.p.m
(Propeller shaft r.p.m)
Max T/O Power (5min) 100%(123,5 kW)
Max. continuous Power 92% (114 kW)
For power-plants limits refer to AFM, Doc. No. 7.01.15, Section 2
- 5.1.4 Firmware: see DAI MSB 42NG-002 See Note 4
- 5.1.5 Mapping: see DAI MSB 42NG-002 See Note 4

6. Load factors: at v_A at v_{NE} with flaps in T/O or LDG position
- | | | | |
|-----------|-------|-----|-----|
| Positive: | 3.8 | 3.8 | 2.0 |
| Negative | -1.52 | 0 | |

7. Propeller:

- 7.1 Model: 2 MT-Propeller MTV-6-R-C-F/CF187-129
- 7.2 Type Certificate: EASA Prop. Type Certificate Data Sheet P.094
See note 5
- 7.3 Number of blades: 3
- 7.4 Diameter: 1870 mm
- 7.5 Sense of Rotation: CW
- 7.6 Settings: Low pitch setting: 12 °
Feather position: 81 °
Start Lock: 15°

8. Fluids:

- 8.1 Fuel: Jet A-1 (ASTM 1655), see note 8
Diesel (EN590), see note 10
- 8.2 Oil: Engine: Shell Helix Ultra 5W30 or 5W40
or see AFM, Doc. No. 7.01.15, Section 2
Gearbox: Shell SPIRAX GSX 75W-80
or see AFM, Doc. No. 7.01.15, Section 2
- 8.3 Coolant: Water / Cooler Protection
for more details see AFM, 7.01.15, Section 2
- 8.4 Ice Protection Fluids: AL-5 (DTD 406B) or Aeroshell Compound 07
for more details see AFM, 7.01.15, Suppl. S03

9. Fluid capacities:

9.1 Fuel:

Standard Fuel Tank

Total: 196.8 liters 52 US Gallons

Usable: 189.2 liters 50 US Gallons

Auxiliary Fuel Tank

Total: 104 liters 27,4 US Gallons

Usable: 100 liters 26,4 US Gallons

9.2 Oil: each engine

Maximum: 7 liters

Minimum: 5 liters

9.3 Coolant system capacity:

Approx. 7 liters

10. Air Speeds:

Design Manoeuvring Speed v_A

up to 1700 kg 114 KEAS

1701 to 1800 kg 121 KEAS

above 1800 kg 125 KEAS

Flap Extended Speed v_{FE}

Approach 135 KEAS

Landing 110 KEAS

Maximum Landing Gear Operation Speed v_{LO}

155 KEAS

Maximum Landing Gear Extended Speed v_{LE}

192 KEAS

Minimum Control Speed Airborne v_{MCA} 75 KEAS

Maximum structural cruising speed v_{NO}
(= Maximum structural design speed v_C)

155 KEAS

Never exceed speed v_{NE}

192 KEAS

11. Maximum Operating Altitude:

5486 m (18 000 ft)

12. Allweather Operations Capability:

Day/Night-VFR, IFR

Flights into known or forecast icing conditions

See Note 6

13. Maximum Weights:

See Note 11

Take-off

1900 kg (4189 lb)

If MÄM 42-678 is installed

1999 kg (4407 lb)

Zero Fuel

1765 kg (3891 lb)

If MÄM 42-659 is installed

1835 kg (4045 lb)

Landing

1805 kg (3979 lb)

If MÄM 42-659 is installed

1999 kg (4407 lb)

14. Centre of Gravity Range:	Forward limit		
	At 1450 kg	2.350 m behind Datum	
	At 1468 kg	2.350 m behind Datum	
	At 1900 kg	2.418 m behind Datum	
	If MÄM 42-678 is installed		
	At 1999 kg	2.434 m behind Datum	
		Varying linearly with mass in between	
	Rear limit		
	At 1450 kg	2.454 m behind Datum	
	At 1700 kg and above	2.480 m behind Datum	
		Varying linearly with mass in between	
	If OÄM 42-199 is installed (see note 9):		
	For all weights	2.450 m behind Datum	
15. Datum:	2.196 m	in front of leading edge of stub-wing at the wing joint	
16. Control surface deflections:			
	Aileron	trailing edge up	25° ± 2°
		trailing edge down	15° + 2° - 0°
	Elevator	railing edge up	15.5° ± 0.5°
		trailing edge down	13° ± 1°
	Elevator Trim Tab	nose up at elevator 10° up	+ 17° ± 5°
		nose down at elevator 10° up	- 35° ± 5°
	Rudder	left	27° ± 1°
		right	29° ± 1°
	Rudder Trim Tab	trim RH at rudder 20° LH	+ 54° ± 5°
		trim LH at rudder 20° LH	+ 22° ± 5°
	Flaps	Cruise flap setting	0° + 2° - 0°
		Approach flap setting	20° + 4° - 2°
		Landing flap setting	42° + 3° - 1°
17. Levelling Means:	floor of front baggage compartment levelled		
18. Minimum Flight Crew:	1 (Pilot)		
19. Maximum Passenger Seating Capacity:	3		
20. Baggage/Cargo Compartments:	Location	max. allowable Load	
	Front Baggage Compartment	30 kg (66 lb)	
	Behind Rear Seats	45 kg (100 lb)	
	Aft part of Baggage Extension	18 kg (40 lb)	
	Whole aft Baggage Compartment together	45 kg (100 lbs)	
21. Wheels and Tyres:	Nose Wheel Tyre Size	5.00 – 5	

Main Wheel Tyre Size 15x6.0–6

22. (Reserved): N/A

D.IV. Operating and Service Instructions

1. Flight Manual: Document No. 7.01.15 including AFM Supplement M00
2. Technical Manual: Airplane Maintenance Manual (AMM) Document No. 7.02.15 (incl. Airworthiness Limitations) including Supplement M00,
3. Service Information and Service Bulletins
4. Spare Parts Catalogue: Document No. 7.03.15
5. Instruments and aggregates: refer to AMM Doc. No. 7.02.15 Chapter 1

D.V. Notes:

1. This certification applies to serial numbers 42.339, 42.MN001 and subsequent for production at Diamond-Austria. DA 42 M may be converted to Model DA 42 M-NG by DAI approved SB OSB 42-081.
2. Approved Noise Levels in accordance to the EASA data sheet for noise TCDSN A.005.
3. For approved software versions of Gamin G1000 Integrated Avionic System see DAI MSB 42NG-003, at latest issue. Garmin Software PNo. 010-00670-01 or later approved version is required.
4. Approved engine model for installation in the DA 42 NG: E4-B
The approved firmware and mapping is according to DAI MSB 42NG-002 at latest issue.
5. Propeller Equipment : Governor: P-877-16
6. Flights into known or forecast icing conditions is approved if the liquid fluid ice protection system in accordance to Major Design Change OÄM 42-160 is installed.
7. The basic DA42 M-NG does not include provisions for specific mission purposes.

The specific type design for mission equipment and its installations are not part of the DA42 M-NG certification; this is approved only in accordance to EASA TCDS A.513

For the purpose of a later on STC or installation of mission equipment that can fully comply with the standard TC Basis the following Modifications are approved for installation.

OÄM 42-241 Belly Pod (Std. TC)

The following additional Limitations apply:

- Flights into known or forecast icing conditions prohibited

- AFM and AMM Supplement M07 must be furnished

OÄM 42-228 Nose with Hard Points

The following additional Limitations apply:

- Flights into known or forecast icing conditions prohibited
- Most rearward flight CG: 2,45 m aft of Datum at 1510 kg
2,47 m aft of Datum at 1700 kg and above
Linear variation in between

If OÄM 42-199 is installed (see note 09):

for all weights 2,45 m aft of Datum

- AFM and AMM Supplement M05 must be furnished
- Maximum operating speed with Equipment installed 156 KIAS

OÄM 42-240 Nose Pod (Std. TC)

The following additional Limitations apply:

- Flights into known or forecast icing conditions prohibited
- Most rearward flight CG: 2,44 m aft of Datum at 1510 kg
2,46 m aft of Datum at 1700 kg and above
Linear variation in between

If OÄM 42-199 is installed (see note 09):

2,44 m aft of Datum at 1510 kg

2,45 m aft of Datum at 1605 kg and above

Linear variation in between

- AFM and AMM Supplement M06 must be furnished
- Maximum operating speed with Equipment installed 156 KIAS

8. For additional approved Jet Fuel specifications see AFM Section 2.
9. The Variable Elevator Stop is removed with OÄM 42-199 installed.
10. Operation with Diesel fuel is only approved, if OÄM 42-251 is installed.
11. The following Design Mass Configurations are approved:

Design Changes installed	Standard	MÄM 42-659	MÄM 42-659 and MÄM 42-678	MÄM 42-659 and MÄM 42-678 and OÄM 42-260
MTOM	1900 kg (4189 lb)	1900 kg (4189 lb)	1999 kg (4407 lb)	2001 kg (4411 lb)
MZFM	1765 kg (3891 lb)	1835 kg (4045 lb)	1835 kg (4045 lb)	1835 kg (4045 lb)
MLM	1805 kg (3979 lb)	1900 kg (4189 lb)	1999 kg (4407 lb)	1999 kg (4407 lb)

MTOM – maximum take-off mass; MZFM – maximum zero fuel mass; MLM – maximum landing mass

The retrofit installation of the design changes is only approved per TC Holder Service Bulletins.

The Maximum Take Off Mass of 2001 kg (4411 lb) per OÄM 42-260 is intended only for cases where it is operationally more suitable to have a MTOM above 2000 kg. The forward Center of Gravity Limit at MTOM 2001 kg (4407 lb) is 2.434 m (95.83 in) aft of datum plane.

ADMINISTRATIVE SECTION

I. Acronyms

N/A

II. Type Certificate Holder Record

Diamond Aircraft Industries GmbH
N.A. Otto-Str. 5
A-2700 Wiener Neustadt
Austria

III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 1	13-May-2004	Initial Issue	13-May-2004
Issue 2	17-Dec-2004	Changed to reflect IFR certification	-
Issue 3	29-Sep-2005	Page 1: Issue 3 added Page 1, List of effective pages: page "9" added Page 2: Section 3 added Page 3, Section 1, I: Issue to 3 changed Page 3, Section 1, II: Exemption deleted not applicable in EASA Page 4, Section 1, II.9: CRI E-04 added Page 4, Section 1, III.5.1: reference changed from SI 42-002 to MSB 42-007 Page 4, Section 1, III.5.2: reference changed from SI 42-003 to MSB 42-008 Page 5, Section 1, III.8.3: "Distilled Water" changed to "Water" Page 7, Section 1, V.3: reference changed from SI 42-002 to MSB 42-007 Page 7, Section 1, V.4: reference changed from SI 42-003 to MSB 42-008 Page 9, Section 3: Section 3 added completely	-
Issue 4	16-Dec-2005	OÄM 42-056 Auxiliary fuel tank OÄM 42-054 Flights into known icing conditions MÄM 42-037 Diesel Fuel Operation MÄM 42-088 Take off mass 1785 kg Page 3, Section 1, II.7 : add CRI E-03 Page 4, Section 1, II.9 : add CRI B-03 Page 5, Section 1, III.8 : add 8.1 Diesel (EN 590) and 8.4 Ice protection fluid Page 5, Section 1, III.9.1 : add Auxiliary fuel tank Page 5, Section 1, III.10 : add and change design manoeuvring speed Page 5, Section 1, III.12 : add known icing Page 5, Section 1, III.13 : add 1785 kg Page 5, Section 1, III.14: change cg range up to 1785 kg Page 7, Section 1, V: add Notes 5,6,7, noise level in note 2 Page 7, Section 1, V: add in Notes 1, excluding Sno. 42L.001 and 42L.002	-
Issue 5	24-April-2006	Canadian Production Fuel Changes from Engine Certification Misprint correction of VLO Page 3, Section 1, I.4: add Diamond Canada Page 4, Section 1, III.5: change JAA TCDS in EASA TCDS Page 5, Section 1, III.10: VLO corrected misprint since initial version	-

		Page 7. Section 1, V.8: add approved jet fuel variants	
Issue 6	21-Dec-2006	MAM 42-198 Engine TAE 125-02 Page 4, Section 1, III.5 : add TAE 125-02 Page 7. Section 1, V.2 : add noise level for TAE 125-02 Page 7. Section 1, V.3 : add minimum Garmin software version for TAE 125-02 Page 7. Section 1, V.4 : add engine model for TAE 125-02 Page 7. Section 1, V.9 : add note 9 retrofit for TAE 125-02	-
Issue 7	11-Jun-2007	Engine TAE 125-02 renamed TAE 125-02-99 Page 4, Section 1, III.5 Page 7. Section 1, V.2 Page 7. Section 1, V.3 Page 7. Section 1, V.4 Page 7. Section 1, V.9	-
Issue 8	14-Dec-2007	DA 42 M Model Page 7, Section 1, A.V. 9: OSB 42-033 changed to OSB 42-046	14-Dec-2007
Issue 9	02-Apr-2008	OAM 42-102 Autopilot Garmin GFC 700 Page 6. Section 1, AIV AFM Page 11. Section 2, BIV AFM	-
Issue 10	09-Mar-2009	VAM 42-004 Model DA 42 NG, P-EASA.A.C.09012 Section 3 complete new	09-Mar-2009
Issue 11	09-Jun-2009	VAM 42-005 Model DA 42 M-NG, P-EASA.A.C.11271 Section 4 complete new OAM 42-160 "Flights into Known Icing for DA42 NG" Page 15, Section 3,C.III.12, All weather capability Page 17, Section 3,CV.6, Note	09-Jun-2009
Issue 12	09-Jul-2009	OAM 42-175 Fuel TS-1; P-EASA.A.C.12574 BV Note 6 and AV Note 8	-
Issue 13	17-Mar-2010	Administrative Changes Coverpage Page Change Record has been removed no longer required D.V. Note 1 Conversion SB added	-
Issue 14	16-Jul-2010	OAM 42-188 Increase of the maximum Zero Fuel Weight , EASA Project Nr. 0010004589-001 including OAM 42-195 maximum Landing mass 1785 kg AIII.13 weights changed AV. Note 6 changed BIII.13 weights changed BV. Note 8 added Format modified to standard EASA TCDS format.	-
Issue 15	13-Dec-2010	Inclusion of Production in Canada for Model DA 42 NG TS-1 fuelsformodels DA 42 NG, DA 42 M-NG Editorial Changes	-
Issue 16	26-April-2011	Section C.V, Note 7; D.V, Note 8: Additional Fuel Grades added, EASA Project No. 0010010748-001	-
Issue 17	15-Sep-2011	Section A.V, Note 8; B.V, Note 6; C.V, Note 7; D.V, Note 8: General Ref. to AFM	-
Issue 18	12-April-2012	MAM 42-600 Performance Enhancement ,EASA Project Number 0010015152 Section C.III. 16, 9,7,5; Section C.IV.5.AFM New; Section C.V. Note 4, Note 8,9 added Editorial changes	
Issue 19	06-December-2012	Editorial Changes CRI F-05 deleted in accordance to CRI A-01	
Issue 20	18-Dec-2012	Section C and D: OAM 42-199 Removal of Variable Elevator Stop – aft CG Limits EASA Project No. 0010007850-001	
Issue 21	06-Feb-2013	Conversion error corrected Section D.V, Note 1: S/N 42.339 included	
Issue 22	14-Jun-2013	Section D.V. Note 7 OAM 42-240,-241,-228b Nose and Belly Container on Standard TC EASA Project 0010021849	

Issue 23	19-Dec-2013	Section B.III., 5.1.1 Engine TC-Holder Change Section D.III., 8.1 Diesel fuel Operation Section D.V., 10 OAM 42-251 EASA 0010026322'	
Issue 24	25-April-2014	Section C.II 6: CS 23.49, CS 23.562 Section C.III 13 and 14: MTOM and MLM 1999 kg added, MZFM 1835 kg added, CG Limits updated. Section C.V Note 12 added. Section D.II 6: CS 23.49, CS 23.562 Section D.III 13 and 14: MTOM and MLM 1999 kg added, MZFM 1835 kg added, CG Limits updated. Section D.V Note 7 updated, Note 11 added. EASA 0010018576	