

型号认可证数据单

THE VALIDATION DATA SHEET

编号/No: VTC154A
版次/Revision: 2
型号/Type:
DA 40 系列/ DA 40 Series
DA 40
DA 40 D
DA 40 F

批准人/Approved By:

日期/Date: 2006.6.16

本数据单是型号认可证（编号：VTC154A）的组成部分，它规定了符合中国民用航空总局的适航要求所颁发此型号认可证的产品的状态和限制。

This data sheet, which is part of Validation of Type Certificate (No: VTC154A), prescribes condition and limitation under which the product for which the type certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation.

型号认可证持有人/Validation of Type Certificate Holder:

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

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SECTION 1 DA 40

A.I. 总则/General

型号认可证数据单编号: VTC154A	Revision 2	日期: 2006 年 6 月 16 日
VTC Data Sheet No.: VTC154A	Revision 2	Date: 16-June-2006
型号合格证数据单编号: A.022	Issue: 03	日期: 2005 年 9 月 28 日
Data Sheet No.: A.022	Issue: 03	Date: 28-Sept-2005

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|--------------------------------------|--|
| 1. a) 型号/Type: | DA 40 |
| b) 型别/Variant: | --- |
| 2. 适航类别/ Airworthiness Category: | |
| a) | 正常类/Normal |
| b) | 实用类/Utility |
| 3. TC 持有人/Type Certificate Holder: | Diamond Aircraft Industries GmbH
N.A. Otto-Str. 5 A-2700 Wiener Neustadt
Austria |
| 4. 制造人/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 |
| 5. 审定申请日期: | 1997 年 2 月 20 日 |
| Certification Application Date: | 20-Feb-1997 |
| 6. JAA 推荐日期: | 2000 年 10 月 24 日 |
| JAA Recommendation Date : | 24-Oct-2000 |
| 7. 奥地利民航局 TC | |
| Austro Control GmbH Type Certificate | FZ 021 JAA |
| 8. EASA 审定日期: | 2005 年 1 月 21 日 (EASA 再次颁发) |
| EASA Certification Date: | 21. January 2005 (reissue for EASA) |
| 9. 认可申请日期: | 2003 年 10 月 30 日 |
| Validation Application Date: | 30-Oct-2003 |
| 10. CAAC 认可日期: | 2004 年 10 月 26 日 |
| CAAC Validation Date: | 26-Oct-2004 |

A.II. 审定基础/Certification Basis

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| 1. 确定适用规章的参考日期: | 1998 年 10 月 24 日 |
| Reference Date for determining
the applicable requirements: | 24-Oct-1998 |
| 2. (备用/Reserved) | |

3. (备用/Reserved)
4. 审定基础/Certification Basis: As defined in CRI A-01, latest Issue
5. 适航规章/Airworthiness Requirements: JAR-23, Change -, issued 11-Mar-1994
JAR-1, Change 5, issued 15-Jul-1996
6. 选择符合的规章
Requirements elected to comply: JAR-23, NPA 23-3, ACJ Material
7. 专用条件/Special Conditions: CRI F-01, 高能量辐射场(HIRF)的影响防护
Protection from the Effects of HIRF
CRI F-03, 闪电影响及间接影响防护
Protection from the Effects of
Lightning Strikes, Indirect Effects
CRI O-01, 滑翔机牵引/Glider Towing
CRI O-02, 拖曳索回收装置
Tow Cable Retraction Mechanisms
8. (备用/Reserved):
9. 等效安全/Equivalent Safety Findings: 无/None
10. 环境标准/Environmental Standards: 国际民航组织附件 16, 第一卷,
1993 年第 3 版
ICAO, Annex 16, Volume 1,
Third Edition, 1993
CRI A-03 for additional national requirements
See Note 2
11. 认可审定基础/Validation Basis: 接受审定基础/Accept Certification Basis

A.III. 技术特性和使用限制/Technical Characteristics and Operational Limitations

1. 型号设计定义/Type Design Definition: 现行颁发的文件为 No. 6.07.00 第 5 章,
包括 MÄM 40 001 至 40 007 及其后的设计更改
Current issue of Doc.No. 6.07.00, Chapter 5
including Design Changes MÄM 40-001 to
40-007 and following
2. 描述/Description: 单发、四座悬臂式下单翼飞机, 复合材料结构,
固定前三点式起落架, T 型尾翼
Single engine, four-seated cantilever low wing
airplane, composite construction,
fixed tricycle landing gear, T-tail
3. 设备/Equipment: 设备清单见飞行手册 (No. 6.01.01) 的第 6 章
Equipment list, AFM, Doc.No. 6.01.01,
Section 6
4. 尺寸/Dimensions:
翼展/Span 11.94 m (39 ft 2 in)
长度/Length 8.01 m (26 ft 3 in)

高度/Height	1.97 m (6 ft 6 in)	
机翼面积/Wing Area	13.54 m ² (146 sqft)	
5. 发动机/Engines:	1 Textron Lycoming IO-360 M1A	
	FAA Engine Type Certificate Data Sheet 1E10	
5.1 发动机限制/Engine Limits:		
最大起飞转速		
Max take-off rotational speed	2700 r.p.m.	
最大连续转速		
Max continuous rotational speed	2400 r.p.m	
动力装置限制参见飞行手册 (No. 6.01.01) 的第 2 章		
For power-plants limits refer to AFM, Doc. No. 6.01.01, Section 2		
6. (备用/Reserved)		
7. 螺旋桨/Propellers:	1 mt-Propeller MTV-12-B/180-17()	
	() – designations: none or f	
	LBA Propeller TCDS 32.13	
7.1 设置/Settings:		
低桨叶角设置/Low pitch setting:	10.5°	
高桨叶角设置/High pitch setting:	30°	
8. 液体/Fluids:		
8.1 燃油/Fuel:	AVGAS 100 LL	
8.2 滑油/Oil:	滑油符合规范/Oils conforming to	
	spec. SAE J1899 / MIL-L-22851	
	更多数据详见飞行手册 (No. 6.01.01) 第 2 章	
	For more details see AFM, Doc. No. 6.01.01,	
	Section 2	
9. 液体容量/Fluid capacities:		
9.1 燃油/Fuel:		
标准燃油箱/Standard Fuel Tank	Total: 156 liters	41.2 US Gallons
	Usable: 152.2 liters	40.2 US Gallons
长程燃油箱/Long Range Fuel Tank	Total: 193 liters	51 US Gallons
	Usable: 189.2 liters	50 US Gallons
9.2 滑油/Oil:	Maximum: 7.70 liters	8 qts
	Minimum: 3.785 liters	4 qts
10. 空速/Air Speeds:		
设计机动速度V _A	up to 980 kg	94 KIAS
Design Manoeuvring Speed V _A :	above 980 kg	108 KIAS
襟翼放下速度V _{FE}	full flaps	91 KIAS
Flap Extended Speed V _{FE} :	take-off flaps	108 KIAS
最大结构巡航速度		
Maximum structural cruising speed V _{NO}		
(=最大结构设计速度V _C)		

(= Maximum structural design speed V_C):		129 KIAS
不许超越速度/Never exceed speed v_{NE} :		178 KIAS
11. 最大使用高度/		
Maximum Operating Altitude:	5000 m (16 404 ft)	
12. 气象能力/All weather Capability:		
	昼间目视 Day-VFR	
	夜间目视 Night VFR	see Note 3
	仪表飞行 IFR	see Note 4
禁止进入已知或实际结冰条件飞行/		
Flight into expected or actual icing conditions is prohibited		
13. 最大质量/Maximum Masses:		
起飞/Take-off	实用类/Utility Category:	980 kg (2161 lb)
	正常类/Normal Category:	1150 kg (2535 lb)
着陆/Landing	1092 kg (2407 lb) or	
	1150 kg (2535 lbs) see Note 10	
14. 重心范围/Centre of Gravity Range:		
Forward limit	up to 980 kg	2.40 m behind Datum
	at 1150 kg	2.46 m behind Datum
中间质量线性变化/varying linearly with mass in between		
Rear limit:	for all masses	2.59 m behind Datum
	with Long Range	
	Fuel Tank	2.55 m behind Datum
15. 基准/Datum:		
	2.194 m	机翼对接前缘处
		in front of leading edge of
		stub-wing at the wing joint
16. (备用/reserved)		
17. 水平措施/Levelling Means:		
	楔比/wedge 600 : 31	背鳍前机身管状顶部表面
		top surface of fuselage
		tube in front of dorsal fin
18. 最小飞行机组//Minimum Flight Crew: 1 (Pilot)		
19. 最大乘员		
Maximum Passenger Seating Capacity: 3		
20. (备用/Reserved)		
21. 行李舱/货舱/Baggage / Cargo Compartments		
位置/Location	最大允许载荷/Max. allowable Load	
座椅后/Behind Rear Seats	30 kg (66.14 lbs)	
行李舱/Baggage Tube	5 kg (11.02 lbs)	
行李增加/With Baggage Extension	45 kg (100 lbs)	see note 9
22. 机轮与轮胎/Wheels and Tyres		
前机轮轮胎尺寸/Nose Wheel Tyre Size 5.00 - 5		
主机轮轮胎尺寸/Main Wheel Tyre Size 6.00 - 6 or		
	15x6.0 - 6	see note 8

经批准的轮胎与等级，
详见《飞机维修手册（No. 6.02.01）》
For approved Types and rating
see AMM, Doc. No. 6.02.01

A.IV. 使用与服务说明书/Operating and Service Instructions

飞机飞行手册/Airplane Flight Manual (AFM) Document No. 6.01.01-E
Airplane Maintenance Manual (AMM)
(incl. Airworthiness Limitations) Document No. 6.02.01
Service Informations and Service Bulletins

A.V. Notes

1. 本合格审定适用于奥地利钻石公司生产的序列号从 40.006 到 40.200，和加拿大钻石公司生产的序列号从 40.201 起的飞机。

This certification applies to Serial numbers 40.006 to 40.200 for production at Diamond-Austria and Serial numbers 40.201 and subsequent for production at Diamond-Canada.

2. 批准的噪声水平是依据/Approved Noise Levels in accordance to:

欧洲联合条例 JAR36 部 C 分部和/JAR 36, Subpart C &

国际民航组织附件 16 第十章附录 6/ICAO Annex 16, Chapter X, App. 6 : 69.28 dB(A)

3. 如果使用夜间目视飞行规则，必须纳入可选的设计更改 OÄM 40-064。

For Night VFR operation the optional design change OÄM 40-064 must be incorporated.

4. 如果使用仪表飞行规则，必须纳入可选的设计更改 OÄM 40-067。

For IFR operation the optional design change OÄM 40-067 must be incorporated.

5. 如果用于牵引滑翔机，必须纳入可选的设计更改 OÄM 40-063。

For glider towing operation the optional design change OÄM 40-063 must be incorporated.

6. 备用/Reserved

7. 文件 OÄM40-071 定义的长程燃油箱适用于生产序列号 40.030 和往后的飞机。

The Long Range Fuel Tank, as defined in OÄM 40-071, applicable for Serial Number 40.030 and subsequent.

8. 依据 MÄM 40-123 文件，15x6.0-6 规格尺寸的轮胎仅批准与 18mm 的主起落架支柱连接。

The tire dimension 15x6.0-6 is only approved in conjunction with the 18 mm MLG strut in accordance with MÄM 40-123

9. 如选择完成了 OÄM 40-163 文件规定的设计更改，可增加行李负载。

The increased baggage load is applicable if the baggage extension, Optional Design Change OÄM 40-163 is installed.

10. 只有安装了强制的设计更改 MÄM 40-123，才可以批准 1150 kg (2535 lbs)的着陆质量。

The landing mass of 1150 kg (2535 lbs) is only approved with Mandatory Design Change MÄM 40-123 installed.

SECTION 2 DA 40 D

B.I. 总则/General

型号认可证数据单编号: VTC154A	Revision 2	日期: 2006 年 6 月 16 日
VTC Data Sheet No.: VTC154A	Revision 2	Date: 16-June-2006
型号合格证数据单编号: A.022	Issue: 03	日期: 2005 年 9 月 28 日
Data Sheet No.: A.022	Issue: 03	Date: 28-Sept-2005
1. a) 型号/Type:	DA 40	
b) 型别/Variant:	DA 40 D	
2. 适航类别/ Airworthiness Category:		
a)	正常类/Normal	
b)	实用类/Utility	
3. TC 持有人/Type Certificate Holder:	Diamond Aircraft Industries GmbH N.A. Otto-Str. 5 A-2700 Wiener Neustadt Austria	
4. 制造人/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	
5. 审定申请日期:	1997 年 2 月 20 日 大改 OÄM 40-100-DA 40 D, 2002 年 1 月 11 日	
Certification Application Date:	20-Feb-1997 11-Jan-2002, for Major Change OÄM 40-100 - DA 40 D	
6. JAA 推荐日期:	2000 年 10 月 24 日	
JAA Recommendation Date :	24-Oct-2000	
7. 奥地利民航局 TC		
Austro Control GmbH Type Certificate	FZ 021 JAA	
8. EASA 审定日期:	2005 年 1 月 21 日 (EASA 再次颁发)	
EASA Certification Date:	21. January 2005 (reissue for EASA)	
9. 认可申请日期:	2003 年 10 月 30 日	
Validation Application Date:	30-Oct-2003	
10. CAAC 认可日期:	2004 年 10 月 26 日	
CAAC Validation Date:	26-Oct-2004	

B.II. 审定基础/Certification Basis

1. 确定适用规章的参考日期:	1998 年 10 月 24 日
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Reference Date for determining the applicable requirements:	24-Oct-1998
2. (备用/Reserved)	
3. (备用/Reserved)	
4. 审定基础/Certification Basis:	As defined in CRI A-01, latest Issue
5. 适航规章/Airworthiness Requirements:	JAR-23, Change -, issued 11-Mar-1994 JAR-1, Change 5, issued 15-Jul-1996
6. 选择符合的规章	
Requirements elected to comply:	无/none
7. 专用条件/Special Conditions:	CRI E-05 使用航空煤油的活塞发动机 Reciprocating Engine using Jet Fuel CRI E-06 对于活塞发动机, 柴油与柴油/航空煤油混合的使用 Use of Diesel Fuel and Diesel/Jet Fuel Blends for Reciprocating Engines CRI E-09 发动机振动水平 Engine Vibration Level CRI E-10 发动机扭矩 Engine Torque CRI F-01 高能量辐射场(HIRF)的影响防护 Protection from the Effects of HIRF CRI F-03 闪电影响及间接影响防护 Protection from the Effects of Lightning Strikes, Indirect Effects CRI F-06 柴油发动机与螺旋桨的全权数字发动机控制(FADEC)安装 Installation of a FADEC Diesel Engine and Propeller
8. (备用/Reserved):	
9. 等效安全/Equivalent Safety Findings:	CRI D-01 单杆动力控制 Single Lever Power Control CRI E-07 冷却液箱 Coolant Tank CRI E-08 电子控制的活塞柴油发动机 Electronically-controlled Reciprocating Diesel Engine CRI E-11 燃油系统-热燃油温度 Fuel System – Hot Fuel Temperature CRI F-05 动力装置仪表 Powerplant Instruments
10. 环境标准/Environmental Standards:	国际民航组织附件 16, 第一卷,

	1993 年第 3 版, 第 7 次修正 ICAO, Annex 16, Volume 1, Third Edition, 1993, Amdt.7. 1997 年 5 月 23 日颁发的 JAR-36 JAR-36, Issued 23-May-1997. CIR A-03 其他国附加要求 for additional national requirements. See Note 2
11. 认可审定基础/Validation Basis:	接受审定基础/Accept Certification Basis
B.III. 技术特性和使用限制/Technical Characteristics and Operational Limitations	
1. 型号设计定义/Type Design Definition:	现行颁发的文件为 No. 6.07.00 第 O 100/7 章, 包括 MÄM 40-075 及其后的设计更改 Current issue of Doc.No. 6.07.00, Chapter O 100/7 including Design Changes MÄM 40-001 to 40-075 and following.
2. 描述/Description:	单台柴油发动机、四座悬臂式下单翼飞机, 复合材料结构, 固定前三点式起落架, T 型尾翼 Single diesel engine, four-seated cantilever low wing airplane, composite construction, fixed tricycle landing gear, T-tail
3. 设备/Equipment:	设备清单见飞行手册 (No.6.01.05) 的第 6 章 Equipment list, AFM, Doc.No. 6.01.05, Section 6.
4. 尺寸/Dimensions:	
翼展/Span	11.94 m (39 ft 2 in)
长度/Length	8.01 m (26 ft 3 in)
高度/Height	1.97 m (6 ft 6 in)
机翼面积/Wing Area	13.54 m ² (146 sqft)
5. 发动机/Engines:	1 台 Thielert 公司发动机, 型号为: TAE 125-01 1 Thielert TAE 125-01. JAA 发动机 TCDS No: JAA/E/02-030 JAA Engine TCDS JAA/E/02-030.
5.1 计算机软件/Firmware:	见注释 5/see note 5.
5.2 参数谱/Mapping:	见注释 5/see note 5.
5.3 发动机限制/Engine Limits:	
最大起飞转速	
Max take-off rotational speed	2500 r.p.m.
最大连续转速	
Max continuous rotational speed	2500 r.p.m
(螺旋桨轴每分钟转速/Propeller shaft r.p.m)	

动力装置限制参见飞行手册（No. 6.01.05）的第 2 章。

For power-plants limits refer to AFM, Doc. No. 6.01.05, Section 2.

6. (备用/Reserved)

7. 螺旋桨/Propellers:1 mt-Propeller MTV-6-A/187-129.
LBA Propeller TCDS No: 32.130/57.

7.1 设置/Settings:

低桨叶角设置/Low pitch setting:12°

高桨叶角设置/High pitch setting:28°

8. 液体/Fluids:

8.1 燃油/Fuel:Jet A-1 (ASTM 1655)
Diesel EN 590 see Note 6

8.2 滑油/Oil:

发动机/engineShell Helix Ultra 5W30 synthetic API SJ/CF 或
Shell Helix Ultra 5W30 synthetic API SJ/CF or
见飞行手册 Doc. No. 6.01.05 第 2 章
see AFM, Doc. No. 6.01.05, Section 2

齿轮箱/gearboxShell EP 75W90 API GL-4 或
Shell EP 75W90 API GL-4 or
见飞行手册 Doc. No. 6.01.05 第 2 章
see AFM, Doc. No. 6.01.05, Section 2

冷却液/Coolant蒸馏水/冷却器保护
Distilled Water / Cooler Protection
更多数据详见飞行手册（No. 6.01.05）第 2 章
For more details see AFM, Doc. No. 6.01.05,
Section 2.

9. 液体容量/Fluid capacities:

9.1 燃油/Fuel:

标准燃油箱/Standard Fuel TankTotal: 113.6 liters 30 US Gallons
Usable: 106.0 liters 28 US Gallons

长程燃油箱/Long Range Fuel TankTotal: 155.2 liters 41 US Gallons
Usable: 147.6 liters 39 US Gallons

9.2 滑油/Oil:Maximum: 6.0 liters 6.3 qts
Minimum: 4.5 liters 4.8 qts

10. 空速/Air Speeds:

设计机动速度 V_A up to 980 kg 94 KIAS

Design Manoeuvring Speed V_A :above 980 kg 108 KIAS

襟翼放下速度 V_{FE} full flaps 91 KIAS

Flap Extended Speed V_{FE} :take-off flaps 108 KIAS

最大结构巡航速度

Maximum structural cruising speed V_{NO}

(=最大结构设计速度 V_C)

(= Maximum structural design speed V_C):		129 KIAS
不许超越速度/Never exceed speed v_{NE} :		178 KIAS
11. 最大使用高度/		
Maximum Operating Altitude:	5000 m (16 404 ft)	
12. 气象能力/All weather Capability:		
	昼间目视 Day-VFR	
	夜间目视 Night VFR	
	仪表飞行 IFR	see Note 3
禁止进入已知或实际结冰条件飞行/		
Flight into expected or actual icing conditions is prohibited		
13. 最大质量/Maximum Masses:		
起飞/Take-off	实用类/Utility Category:	980 kg (2161 lb)
	正常类/Normal Category:	1150 kg (2535 lb)
着陆/Landing	1092 kg (2407 lb) or	
	1150 kg (2535 lbs) see Note 8	
14. 重心范围/Centre of Gravity Range:		
Forward limit	up to 980 kg	2.40 m behind Datum
	at 1150 kg	2.46 m behind Datum
中间质量线性变化/varying linearly with mass in between		
Rear limit:	for all masses	2.59 m behind Datum
	with Long Range	
	Fuel Tank	2.55 m behind Datum
15. 基准/Datum:		
	2.194 m	机翼对接前缘处
		in front of leading edge of
		stub-wing at the wing joint
16. (备用/reserved)		
17. 水平措施/Levelling Means:		
	楔比/wedge 600 : 31	背鳍前机身管状顶部表面
		top surface of fuselage
		tube in front of dorsal fin
18. 最小飞行机组//Minimum Flight Crew: 1 (Pilot)		
19. 最大乘员		
Maximum Passenger Seating Capacity: 3		
20. (备用/Reserved)		
21. 行李舱/货舱/Baggage / Cargo Compartments		
位置/Location	最大允许载荷/Max. allowable Load	
座椅后/Behind Rear Seats	30 kg (66.14 lbs)	
行李舱/Baggage Tube	5 kg (11.02 lbs)	
行李增加/With Baggage Extension	45 kg (100 lbs)	see note 7
22. 机轮与轮胎/Wheels and Tyres		
前机轮轮胎尺寸/Nose Wheel Tyre Size 5.00 - 5		
主机轮轮胎尺寸/Main Wheel Tyre Size 6.00 - 6 or		
	15x6.0 - 6	see note 4

经批准的轮胎与等级，
详见《飞机维修手册（No. 6.02.01）》
For approved Types and rating
see AMM, Doc. No. 6.02.01

B.IV. 使用与服务说明书/Operating and Service Instructions

飞机飞行手册/Airplane Flight Manual (AFM) Document No. 6.01.05-E
Airplane Maintenance Manual (AMM)
(incl. Airworthiness Limitations) Document No. 6.02.01
Service Informations and Service Bulletins

B.V. Notes

1. 本合格审定适用于生产序列号从 40.080、40.084，和序列号从 D4.001 起的飞机，除了序列号 D4.013 之外。

This certification applies to Serial Numbers 40.080, 40.084 and D4.001 and subsequent, with the exception of serial number D4.013.

2. 批准的噪声水平是依据/Approved Noise Levels in accordance to:

配备/标准排气系统的飞机/Equipped with Standard Exhaust System

欧洲联合条例 JAR36 部 C 分部和

国际民航组织附件 16 第十章附录 6: 78.7 dB(A)

JAR 36, Subpart C &

ICAO Annex 16, Chapter X, App. 6: 78.7 dB(A)

配备文件 OÄM 40-096 规定的消音排气系统

Equipped with Exhaust System with Muffler OÄM 40-096

欧洲联合条例 JAR36 部 C 分部和

国际民航组织附件 16 第十章附录 6: 69.5 dB(A)

JAR 36, Subpart C &

ICAO Annex 16, Chapter X, App. 6: 69.5 dB(A)

3. 对于仪表飞行规则，必须纳入可选的设计更改 OÄM 40-136 或 OÄM 40-193。

For IFR operation the optional design change OÄM 40-136 or OÄM 40-193 must be incorporated.

4. 依据 MÄM 40-123 文件，15x6.0-6 规格尺寸的轮胎仅批准与 18mm 的主起落架支柱连接。

The tire dimension 15x6.0-6 is only approved in conjunction with the 18 mm MLG strut in accordance with MÄM 40-123.

5. 对于 TAE 125-01 发动机，批准的软件(计算机软件和参数谱)版次见钻石公司的服务信息 SID4-018 和其后颁发的版次更改。

For approved engine software version (Firmware and Mapping) of TAE 125-01 see DAI Service Information SID4-018, latest issue.

6. 只有纳入了 MÄM 40-129 才可批准使用柴油。

Operation with Diesel fuel is only approved if MÄM 40-129 is incorporated.

7. 如果增加行李舱容积以增加行李舱载荷，需要按 OÄM 40-163 文件进行设计更改。

The increased baggage load is applicable if the baggage extension, Optional Design Change OÄM 40-163 is installed.

8. 只有安装了强制的设计更改 MÄM 40-123，才可以批准 1150 kg (2535 lbs)的着陆质量。

The landing mass of 1150 kg (2535 lbs) is only approved with Mandatory Design Change MÄM 40-123 installed.

9. 只有纳入了 OÄM 40-193 (IFR)或 40-224 (VFR)才可以批准安装 G1000 集成航电系统。对于经批准的软件版本，参见 DAI 服务通告 MSB D4-045，最新版次。

Installation of the G1000 Integrated Avionic System is only approved if OÄM 40-193 (IFR) or 40-224 (VFR) is incorporated. For approved software version see DAI Service Bulletin MSB D4-045, latest issue.

SECTION 3 DA 40 F

C.I. 总则/General

型号认可证数据单编号: VTC154A
 VTC Data Sheet No.: VTC154A
 型号合格证数据单编号: A.022
 Data Sheet No.: A.022

Revision 2 日期: 2006 年 6 月 16 日
 Revision 2 Date: 16-June-2006
 Issue: 03 日期: 2005 年 9 月 28 日
 Issue: 03 Date: 28-Sept-2005

- | | |
|------------------------------------|--|
| 1. a) 型号/Type: | DA 40 |
| b) 型别/Variant: | DA 40 F |
| 2. 适航类别/ Airworthiness Category: | |
| a) | 正常类/Normal |
| b) | 实用类/Utility |
| 3. TC 持有人/Type Certificate Holder: | Diamond Aircraft Industries GmbH
N.A. Otto-Str. 5 A-2700 Wiener Neustadt
Austria |
| 4. 制造人/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 |
| 5. 审定申请日期: | 1997 年 2 月 20 日
VÄM 40-002, 2004 年 7 月 8 日 |
| Certification Application Date: | 20-Feb-1997
8. July 2004 for VÄM 40-002 |
| 6. EASA 审定日期: | 2005 年 4 月 15 日 |
| EASA Certification Date: | 15 April 2005 |
| 7. 认可申请日期: | 2005 年 8 月 8 日 |
| Validation Application Date: | 8-Aug-2005 |
| 8. CAAC 认可日期: | 2006 年 6 月 16 日 |
| CAAC Validation Date: | 16-June-2006 |

C.II. 审定基础/Certification Basis

- | | |
|--|--------------------------------------|
| 1. 确定适用规章的参考日期: | 1998 年 10 月 24 日 |
| Reference Date for determining
the applicable requirements: | 24-Oct-1998 |
| 2. (备用/Reserved) | |
| 3. (备用/Reserved) | |
| 4. 审定基础/Certification Basis: | As defined in CRI A-01, latest Issue |

5. 适航规章/Airworthiness Requirements: JAR-23, Change -, issued 11-Mar-1994
JAR-1, Change 5, issued 15-Jul-1996
6. 选择符合的规章
Requirements elected to comply: JAR-23, NPA 23-3, ACJ Material
7. 专用条件/Special Conditions: CRI F-01, 高能量辐射场(HIRF)的影响防护
Protection from the Effects of HIRF
CRI F-03, 闪电影响及间接影响防护
Protection from the Effects of
Lightning Strikes, Indirect Effects
CRI O-01, 滑翔机牵引/Glider Towing
CRI O-02, 拖曳索回收装置
Tow Cable Retraction Mechanisms
8. (备用/Reserved):
9. 等效安全/Equivalent Safety Findings: 无/None
10. 环境标准/Environmental Standards: 国际民航组织附件 16, 第 1 卷, 第 2 部分,
第 10 章, 修正案 7, CRI A-03F
ICAO Annex 16, Volume 1, Part 2, Chapter 10,
Amendment 7, CRI A-03F
11. 认可审定基础/Validation Basis: 接受审定基础/Accept Certification Basis

C.III. 技术特性和使用限制/Technical Characteristics and Operational Limitations

1. 型号设计定义/Type Design Definition: 现行颁发的文件为 No. 6.07.00 第 V002/7 章
Current issue of Doc.No. 6.07.00,
Chapter V002/7
设计更改 VÄM 40-002 (包括和不包括 VÄM 中
所列的设计更改)
Design Change VÄM 40-002 (including and
excluding the design changes as listed in the
VÄM).
2. 描述/Description: 单发、四座悬臂式下单翼飞机, 复合材料结构,
固定前三点式起落架, T 型尾翼, 定距螺旋桨
Single engine, four-seated cantilever low wing
airplane, composite construction, fixed tricycle
landing gear, T-tail, fix pitch propeller.
3. 设备/Equipment: 设备清单见飞行手册 (No.6.01.02) 的第 6 章
Equipment list, AFM, Doc.No. 6.01.02,
Section 6.
4. 尺寸/Dimensions:

翼展/Span	11.94 m (39 ft 2 in)
长度/Length	8.01 m (26 ft 3 in)
高度/Height	1.97 m (6 ft 6 in)

机翼面积/Wing Area	13.54 m ² (146 sqft)	
5. 发动机/Engines:	1 Textron Lycoming O-360-A4M	
	FAA Engine Type Certificate Data Sheet 286	
5.1 发动机限制/Engine Limits:		
最大起飞转速		
Max take-off rotational speed	2700 r.p.m.	
最大连续转速		
Max continuous rotational speed	2700 r.p.m	
(螺旋桨轴每分钟转速/Propeller shaft r.p.m)		
动力装置限制参见飞行手册 (No. 6.01.02) 的第 2 章。		
For power-plants limits refer to AFM, Doc. No. 6.01.02, Section 2.		
6. (备用/Reserved)		
7. 螺旋桨/Propellers:	1 Sensenich 76EM8S10-0-63	
	FAA Propeller TCDS P4EA	
8. 液体/Fluids:	滑油符合规范/Oils conforming to	
	spec. SAE J1899 / MIL-L-22851	
	更多数据详见飞行手册 (No. 6.01.02) 第 2 章	
	For more details see AFM, Doc. No. 6.01.02,	
	Section 2	
8.1 燃油/Fuel:	AVGAS 100 LL	
8.2 滑油/Oil:		
9. 液体容量/Fluid capacities:		
9.1 燃油/Fuel:		
标准燃油箱/Standard Fuel Tank	Total: 156 liters	41.2 US Gallons
	Usable: 152.2 liters	40.2 US Gallons
长程燃油箱/Long Range Fuel Tank	Total: 193 liters	51 US Gallons
	Usable: 189.2 liters	50 US Gallons
9.2 滑油/Oil:	Maximum: 7.70 liters	8 qts
	Minimum: 3.785 liters	4 qts
10. 空速/Air Speeds:		
设计机动速度 V_A	up to 980 kg	94 KIAS
Design Manoeuvring Speed V_A :	above 980 kg	108 KIAS
襟翼放下速度 V_{FE}	full flaps	91 KIAS
Flap Extended Speed V_{FE} :	take-off flaps	108 KIAS
最大结构巡航速度		
Maximum structural cruising speed V_{NO}		
(=最大结构设计速度 V_C)		
(= Maximum structural design speed V_C):		129 KIAS
不许超越速度/Never exceed speed v_{NE} :		178 KIAS
11. 最大使用高度/		
Maximum Operating Altitude:	5000 m (16 404 ft)	

12. 气象能力/All weather Capability: 昼间目视 Day-VFR
夜间目视 Night VFR
仪表飞行 IFR
- 禁止进入已知或实际结冰条件飞行/
Flight into expected or actual icing conditions is prohibited
13. 最大质量/Maximum Masses:
- | | | |
|-------------|-----------------------|--------------------|
| 起飞/Take-off | 实用类/Utility Category: | 980 kg (2161 lb) |
| | 正常类/Normal Category: | 1150 kg (2535 lb) |
| 着陆/Landing | | 1150 kg (2535 lbs) |
14. 重心范围/Centre of Gravity Range:
- | | | |
|---------------|--|---------------------|
| Forward limit | up to 980 kg | 2.40 m behind Datum |
| | at 1150 kg | 2.46 m behind Datum |
| | 中间质量线性变化/varying linearly with mass in between | |
| Rear limit: | for all masses | 2.59 m behind Datum |
| | with Long Range | |
| | Fuel Tank | 2.55 m behind Datum |
15. 基准/Datum: 2.194 m 机翼对接前缘处
in front of leading edge of
stub-wing at the wing joint
16. (备用/reserved)
17. 水平措施/Levelling Means: 楔比/wedge 600 : 31 背鳍前机身管状顶部表面
top surface of fuselage
tube in front of dorsal fin
18. 最小飞行机组//Minimum Flight Crew: 1 (Pilot)
19. 最大乘员
Maximum Passenger Seating Capacity: 3
20. (备用/Reserved)
21. 行李舱/货舱/Baggage / Cargo Compartments
- | | | |
|-----------------------------|----------------------------|------------|
| 位置/Location | 最大允许载荷/Max. allowable Load | |
| 座椅后/Behind Rear Seats | 30 kg (66.14 lbs) | |
| 行李舱/Baggage Tube | 5 kg (11.02 lbs) | |
| 行李增加/With Baggage Extension | 45 kg (100 lbs) | see note 5 |
22. 机轮与轮胎/Wheels and Tyres
- | | | |
|------------------------------|-------------------------------|------------|
| 前机轮轮胎尺寸/Nose Wheel Tyre Size | 5.00 - 5 | |
| 主机轮轮胎尺寸/Main Wheel Tyre Size | 6.00 - 6 or | |
| | 15x6.0 - 6 | see note 4 |
| | 经批准的轮胎与等级, | |
| | 详见《飞机维修手册 (No. 6.02.01)》 | |
| | For approved Types and rating | |
| | see AMM, Doc. No. 6.02.01 | |

C.IV. 使用与服务说明书/Operating and Service Instructions

飞机飞行手册/Airplane Flight Manual (AFM) Document No. 6.01.02-E
Airplane Maintenance Manual (AMM)
(incl. Airworthiness Limitations) Document No. 6.02.01
Service Informations and Service Bulletins

C.V. Notes

1. 本合格审定适用于奥地利钻石公司生产的序列号从 40.F001 起的飞机, 和加拿大钻石公司生产的序列号从 40.FC001 起的飞机。

This certification applies to Serial numbers 40.F001 and subsequent for production at Diamond-Austria, and Serial numbers 40.FC001 and subsequent for production at Diamond-Canada.

2. 批准的噪声水平是依据/Approved Noise Levels in accordance to:

国际民航组织附件 16 第十章附录 6/

ICAO Annex 16, Volume 1, Part 2, Chapter 10, Amendment 7: 74,8 dB(A)

3. 对于滑翔机牵引使用, 必须纳入可选的设计更改 OÄM 40-063。

For glider towing operation the optional design change OÄM 40-063 must be incorporated.

4. 备用/Reserved

5. 如果增加行李舱容积以增加行李舱载荷, 需要按 OÄM 40-163 文件进行设计更改。

The increased baggage load is applicable if the baggage extension, Optional Design Change OÄM 40-163 is installed.

SECTION 4 进口要求/ IMPORT REQUIREMENTS

1. 运行要求 / Operational Requirements

对于中国的运行的每架飞机，必须满足中国民用航空总局的运行要求。/ For each aircraft to be operated in China, the operational requirements of CAAC must be met.

2. 出口适航证 / Export Certificate of Airworthiness

对于在奥地利钻石公司生产进口到中国的所有飞机，需有奥地利民航局颁发的出口适航证并且声明符合中国民用航空总局批准的型号设计并处于安全运行状态，。 / All aircraft produced by Diamond-Austria may be imported to China require a Export Certificate of Airworthiness issued by ACG and state that the aircraft complies with CAAC approved type design and is in condition for safe operation.

对于在加拿大钻石公司生产进口到中国的所有飞机，需有加拿大民航局颁发的出口适航证并且声明符合中国民用航空总局批准的型号设计并处于安全运行状态，。 / All aircraft produced by Diamond-Canada may be imported to China require a Export Certificate of Airworthiness issued by TCCA and state that the aircraft complies with CAAC approved type design and is in condition for safe operation.

3. 《飞行手册》 / Flight Manual

每架从奥地利或加拿大进口中国的飞机需配有最新版次水平的中国民用航空总局批准的《飞行手册》，欧洲联合航空局将代表中国民用航空总局对从奥地利或加拿大进口中国的单机飞行手册进行的批准。 / Each aircraft imported into China from Austria or Canada requires a CAAC approved Aircraft Flight Manual at the latest applicable revision level. EASA will approve the Aircraft Flight Manual in accordance to the CAAC approved type design on behalf of CAAC.

更改记录/Change Record

	中国民用航空总局认可数据单号、版次和颁发日期 CAAC Validation Data Sheet Number, Revision and issuance date	型号合格证数据单号、版次和颁发日期 Type Certificate Data Sheet Number, Revision and issuance date
R2	CAAC VTC154A, Revision 2, 2006 年 6 月 16 日	EASA.A.022, Revision 03, 28 September 2005
R1	CAAC VTC154A, Revision 1, 2005 年 2 月 6 日	FZ 021-JAA, No.JAA/23/00-001,Issue 12, Date of Issue: 07 May.2004
R0	CAAC VTC154A, Revision 0, 2004 年 10 月 26 日	FZ 021-JAA, No.JAA/23/00-001,Issue 12, Date of Issue: 07 May.2004

-END-