# **Type Acceptance Report**

TAR 6/21B/13 – Revision 2

**Diamond DA 42 Series** 

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## Executive Summary

New Zealand Type Acceptance has been granted to the Diamond Aircraft Industries Model DA 42 Twin Star Series based on validation of EASA Type Certificate number EASA.A.005. There are no special requirements for import.

Applicability is currently limited to the Models and/or serial numbers detailed in Section 2, which are now eligible for the issue of an Airworthiness Certificate in the Standard Category in accordance with NZCAR §21.191, subject to any outstanding New Zealand operational requirements being met. (See Section 5 of this report for a review of compliance of the basic type design with the operating Rules.) Additional variants or serial numbers approved under the foreign type certificate can become type accepted after supply of the applicable documentation, in accordance with the provisions of NZCAR §21.43(c).

NOTE: The information in this report was correct as at the date of issue. The report is generally only updated when an application is received to revise the Type Acceptance Certificate. For details on the current type certificate holder and any specific technical data, refer to the latest revision of the State-of-Design Type Certificate Data Sheet referenced herein.

## 1. Introduction

This report details the basis on which Type Acceptance Certificate No. 6/21B/13 was granted in the Standard Category in accordance with NZCAR Part 21 Subpart B.

Specifically, the report aims to:

- (a) Specify the foreign type certificate and associated airworthiness design standard used for type acceptance of the model(s) in New Zealand; and
- (b) Identify any special conditions for import applicable to any model(s) covered by the Type Acceptance Certificate; and
- (c) Identify any additional requirements which must be complied with prior to the issue of a NZ Airworthiness Certificate or for any subsequent operations.

The report notes the status of all models included under the State-of-Design type certificate which have been granted type acceptance in New Zealand, which are listed in Section 2. The history of the Diamond DA 42 Series type acceptance in New Zealand under EASA type certificate A.005 and Transport Canada type certificate A-247 is listed in Appendix 1.

## 2. Aircraft Certification Details

#### (a) State-of-Design Type and Production Certificates:

Manufacturer:	Diamond Aircraft Industries GmbH
Type Certificate: Issued by:	EASA.A.005 European Aviation Safety Agency
Production Approval	AT.21G.0001

#### (b) Other State-of-Manufacture Type and Production Certificates:

Manufacturer:	Diamond Aircraft Industries, Inc.
Import TC: Issued by:	A-247 Transport Canada
Production Approval	: 161-93

#### (c) Models Covered by the Part 21B Type Acceptance Certificate:

(i)	Model:	DA 42		
	MCTOW:	1700 kg (3748 lb.) 1785 kg (3935 lb.) – with MÄM 42-088		
	Max. No. of Seats:	4		
	Noise Standard:	ICAO Annex 16, Volume 1/JAR 36		
	Engine:	TAE 125-01 TAE 125-02-99 – with MÄM 42-198 and OSB 42-046 TAE 125-02-114 – with OÄM 42-252 and OSB 42-117. Type Certificate: E.055 Issued by: European Aviation Safety Agency		
	Propeller:	MTV-6-A-C-F/187-1 Type Certificate:	129 P.094	
		Issued by: European Aviation Safety Agency		
(	Commercial Model:	DA 42 L360 (DA	A 42 with Transport Canada STC SA09-54)	
	Engine:	Lycoming L/IO-360 Type Certificate: Issued by:	-M1A 1E10 Federal Aviation Administration	
	Propeller:	MTV-12-B-C-F/CF(I Type Certificate: Issued by:		

(ii) Model:	DA 42 NG		
MCTOW:	1900 kg (4189 lb.) 1999 kg (4407 lb.) – with MÄM 42-659 and MÄM 42-678 2001 kg (4411 lb.) – with MÄM 42-659/678 and OÄM 42-260		
Max. No. of Seats:	4		
Noise Standard:	ICAO Annex 16, Volume 1/CS-36		
Engine:	Austro Engine E4-B Austro Engine E4-C – Type Certificate: Issued by:		
Propeller:	MTV-6-A-C-F/CF187-129 MTV-6-R-C-F/CF190-69 – with MÄM 42-600 Type Certificate: P.094 Issued by: European Aviation Safety Agency		

## 3. Application Details and Background Information

The application for New Zealand type acceptance of the Diamond DA42 was from the manufacturer, dated 21 September 2005. The first-of-type example was serial number 42.076, registered ZK-CTH. The Diamond DA 42 is a low-wing four-seat light monoplane with all-composite airframe, T-tail configuration and two geared turbocharged FADEC-equipped compression-ignition engines, and comes standard with the Garmin G1000 EFIS. It was developed from the earlier DA 40 single-engined model largely by incorporating a new wing centre-section.

As part of validation of the EASA Type Certificate, CAANZ sent a certification engineer to the Diamond factory at Weiner Neustadt in Austria for three days of on-site review of certification data. A brief report on this review is included as Attachment 4, and Diamond's response is included as Attachments 5 and 6.

Type Acceptance Certificate Number 6/21B/13 was granted on 10 February 2006 to the Diamond Model DA 42 based on validation of EASA Type Certificate number EASA.A.005 (Austro Control has EASA PCM status for the DA 42). <u>There are no special requirements for import</u>.

This report was raised to Revision 1 to include the DA42 L360, which is the commercial name for the DA42 with Lycoming piston engines installed in accordance with Transport Canada STC number SA09-54. The conversion involved minimal changes to the airframe, comprising new cowlings, engine mount and minor modifications to allow for additional engine control cable routing. Type acceptance was granted on 9 September 2009. The first-of-type examples were serial no.s 42.AC142 and 42.AC151 registered ZK-MTR and ZK-MTS.

Revision 2 was issued to include the DA 42 NG (New Generation) model. The opportunity was also taken to update the format, and separate out the engines and propellers into separate type acceptance reports. The DA 42 NG is the version of the aircraft using the 170 hp Austro Engine E4 diesel engine, which was developed by Diamond Aircraft. There were few other changes, except MCTOW was increased to compensate for the heavier engines. Design Change MÄM 42-600 introduced a number of changes including a more efficient propeller and a different engine model that resulted in an overall performance benefit. This also resulted in different operating airspeeds which required a new AFM. Type acceptance of the Diamond DA 42 NG was granted on 15 October 2020.

## 4. NZCAR §21.43 Data Requirements

The type data requirements of NZCAR Part 21B Para §21.43 have been satisfied by supply of the following documents:

(1) State-of-Design Type certificate:

EASA Type Certificate EASA.A.005 – Diamond Aircraft Industries DA 42

EASA Type Certificate Data Sheet no. EASA.A.005 at Issue 42 dated 14 June 2019 – Model DA 42 approved 13 May 2004

- Model DA 42 NG approved 9 March 2009

Transport Canada Supplemental Type Certificate SA09-54 Issue 1 – July 17, 2009

- (2) Airworthiness design requirements:
  - (i) Airworthiness Design Standards:

The certification basis of the Diamond DA 42 Series is JAR-23, Amendment 1, issued 01 February 2001 and JAR-1, Change 5 issued 15-Jul-1996. This is an acceptable certification basis in accordance with CAR Part 21B paragraph §21.41 and Advisory Circular 21-1, because JAR-23 is accepted as an equivalent to FAR 23, the basic standard for Normal Category Airplanes called up under Part 21 Appendix C. Eight Special Conditions were complied with, and there were six findings of equivalent safety (ELOS). These have been reviewed and accepted by the CAA. For the DA 42 NG the certification basis was unchanged, except three of the six DA 42 ELOS were not required and three were converted to Special Conditions. One new ELOS was made, and three paragraphs of CS-23 were added as elect-to-comply requirements. There are no non-compliances and no additional special conditions have been prescribed by the Director under §21.23.

The certification basis of STC SA09-54 is AWM 523, up to and including Change 523-7 dated December 30, 2006. (The equivalent FAA certification basis is FAR 23 up to and including Amendment 55, dated 01 March, 2002.) Four previous special conditions were applied, and two findings of equivalent safety made.

(ii) Special Conditions:

#### DA 42 and DA 42 NG:

CRI D-02 – Variable Elevator Stop – The aircraft has an electrically operated actuator which limits elevator up travel above a certain engine power setting to ensure compliance with the stall requirements of JAR 23.201 and 23.203.

CRI E-02 – Use of Jet Fuel for Reciprocating Engines – Rules did not envisage the use of Jet Fuel for reciprocating engines. Interpretation was required for rules which state turbine only (particularly because kerosene-based fuels absorb greater amounts of water than gasoline fuels and have greater potential for fuel system icing), and for some engine rules which were not actually applicable.

CRI E-03 – Use of Diesel Fuel for Reciprocating Engines – The rules did not envisage use of diesel fuel for reciprocating engines. Clarification of some rules was required, particularly as the EN590 specification allows much wider production variations. (However the TAE 125 is approved for operation with any fuel mixture ratio of Jet A-1 [ASTM 1655] and Diesel [EN 590]) The use of diesel fuel is now approved if Major Design Change MÄM 42-037 is installed.

CRI E-06 – Engine Vibration Level JAR 23.251, 23.572, 23.573, 23.613, 23.627, 23.629 – The engine uses three attachment points with softer than usual shock mounts, to reduce vibration. Vibration levels for all possible failure modes were evaluated, including starting and stoppage. The effect on the fatigue spectrum and flutter were also considered.

CRI E-07 – Engine Torque JAR 23.361 – A diesel with much higher compression ratio has its maximum torque at a lower RPM value. Substantiation of the torque factor of 2 was required, either by test and analysis, or by comparison with the original Lycoming IO-360 installation.

CRI F-01 – Protection from the effects of HIRF JAR 23.1309; 23.1431(a) – Standard Special Condition specifying the HIRF environment to be met for electrical and electronic systems and equipment, the failure of which would prevent the continued safe flight and landing of the aircraft.

CRI F-03 – Protection from the effects of Lightning Strike; Indirect Effects JAR 23.867, JAR 23.954, JAR 23.1309 – Specifies the aircraft system design provisions, functionality requirements and the acceptable test standards for environment and test waveforms, lightning zoning and the indirect effects of lightning (EUROCAE Documents ED-81, ED-84 and ED-91).

CRI F-07 – Human factors in Integrated Avionic Systems JAR 23 Change 1 – Installation of the Garmin G1000 introduces Novel Features, including new technology, new pilot interface and different use of equipment which require Special Conditions. These cover ease of operation, including automation; effects of pilot errors; normal and abnormal workload and adequacy of feedback.

#### (iii) Equivalent Level of Safety Findings:

DA 42:

CRI B-03 – JAR 23.1419(a), 23.49 Stall Speed in Icing Conditions – On the DA42 for OÄM 42-054 Approval of Flight into Known Icing Conditions Diamond used the provisions of FAA AC23.1419-2C to use compensating factors in lieu of meeting the minimum Vso of 61 knots with simulated critical ice accretion.

CRI D-01 – Single Lever Power Control JAR 23.777(d), 23.779(b), 23.781(b), 23.1141(a) – Single Lever Power Control (SLPC) are not covered by existing rule requirements. To ensure equivalence to existing split lever functions means must be established for pre-flight power verification checks and propeller governing checks.

#### DA 42 but Changed to Special Condition for DA 42NG:

CRI E-04 Liquid Cooling – Coolant Tank JAR 23.1061(b), 1063 – The rules do not cover the use of a closed loop cooling system, which is state of the art for automobiles. Expansion tank and overflow bottle capacity must be sufficient to ensure safe operation following loss of cooling fluid, and both must be able to withstand the vibration, inertia and fluid loads experienced. A low fluid level warning device will also be provided for the pilot. (This was an Equivalent Safety Finding for the DA40D, and the Issue paper is based on the DA40D Issue paper and assumes an ESF decision will be needed, but it was not listed on the TCDS at Issue 02. It has subsequently been added.)

CRI E-05 – Electronically Controlled Reciprocating Diesel Engine JAR 23.1141, 23.1143, 23.1145, 23.1165, 23.1309 –A diesel engine has no ignition system but is electronically controlled and requires electrical power for continued operation. Electrical system and battery reliability and independence requirements were addressed and an engine shut-down means equivalent to an ignition switch provided.

CRI F-04 – Powerplant Instruments JAR 23.1305, 23.1521 – A Manifold Pressure gauge is not an adequate indication of power for a single-control-lever diesel engine. The DA 42 instead has a power indicator instrument, and a cooling fluid temperature gauge is used in lieu of a CHT indicator.

#### DA 42 L360:

IP FT-2 Stall Warning CAR 513.11(2); STD 523.207(c) & (e) – The DA42L in the forward cg cases does not show the required 5 knots stall warning. This was accepted on the basis of acceptable handling qualities when the stall warning is not present, in conjunction with AFM cautions and procedures. (The stall is defined as the stick held on the aft stop for two seconds and requires extreme measures. This is reached at an AoA below the aerodynamic stall, and the aircraft enters a phugoid.)

DA 42 NG:

CRI E-10 Electric Fuel Pumps JAR 23.991(a), 23.991(b) – The rules for direct driven main engine pump and independence of fuel pumps could not be met. EASA specified a series of conditions for the Main and Emergency Pumps related to function, independence, power supply and failure effects.

*(iv) Airworthiness Limitations:* See AMM Chapter 04-00 Airworthiness Limitations

(3) Aircraft Noise and Engine Emission Standards:

(i) Environmental Standard:

CRI A-03 Issue 3, dated 5.5.04 – Additional National Environmental Requirements, Noise Measurements – The Model DA 42 has been certificated to JAR 36 Edition 1, with noise measurement method identical to ICAO Annex 16, Volume 1, Third Edition, Amendment 7 dated 1993.

The STC environmental standard was AWM 516, Change 516-8 published June 30, 2007. (AWM 516 calls up ICAO Annex 16 as the applicable noise emission standard.)

Noise measurement for the DA 42 NG was done according to CS 36, which references ICAO Annex 16 Volume, Fifth Edition, Chapter 10.

(ii) Compliance Listing:

DA 42 AFM Approved Noise data: ICAO Annex 16 Chapter X, App 6 and JAR-36 Subpart C (1700 kg) 75.2 dB(A) ICAO Annex 16 Chapter X, App 6 and JAR-36 Subpart C (1785 kg) 76.8 dB(A)

Doc. No. FTR-DA42-019 – Noise Test Results – IO-360 Engine Installation. Noise level of DA42-L360 with IO-360 engines and MT propeller is 82.08 dB(A)

Doc. No. 7.07.02 Chapter M678 / CRI A-01 / 1 – Analysis Report Environment Requirements (Noise) – DA 42 NG MTOM 2'000kg – Valid Noise Level 79.5 dB(A)

EASA TCDS for Noise TCDSN.A.005 has data for all configuration options

#### (4) Certification compliance listing:

Doc. No. 7.07.00 Chapter 1 – Means of Compliance DA 42 – Basic Type Design, including all Mandatory Design Changes plus Optional Design Changes OÄM 42-051, A/P & OÄM 42-052, IFR – Rev. 7 dated 20-Dec-2004 [approved by ACG as PCA (JAA)]

Document Number 7.07.06 Chapter CRI A-03 – Additional National Environmental Requirements – Aircraft Noise – Revision 1 dated 3 May 2004

CRI A-01 Issue 4 5.5.2004 – Certification Basis for the Basic DA 42

CRI A-05 Issue 1 9.4.2004 – Type Design Definition for Type Certification

CRI B-01 Issue 3 13.4.04 – Power Available/Data Reduction/Propeller Speed – Covers a basis for specifying engine power, determining performance data and correction of flight test data.

CRI C-01 Issue 2 5.12.2003 – Composite Materials and Workmanship – Details applicable design and environmental conditions for composites. (Carried over from DA40.)

CRI C-02 Issue 2 5.12.03 – Damage Tolerance and Fatigue Tests – Specifies an initial entry-into-service fatigue life and allows post-TC fatigue testing.

CRI C-03 Issue 3 8.3.04 – Structural Static Tests – Details the extent of static structural testing proposed, and how carry-over from the Model DA40 is proposed.

CRI E-01 Issue 2 20.2.04 – Propeller Type Certification – JAR Advisory material requires propellers to be type certificated against JAR-P. The MTV-6 is certified against FAR 35, which requires individual validation by some JAA Countries. (France and the UK)

CRI F-02 Issue 2 5.12.03 Protection from the effects of Lightning Strike; Direct Effects – Specifies EUROCAE documents which provide advisory material for compliance with JAR 23.867/23.954 for lightning direct effects.

CRI F-06 Issue 4 19.4.2004 Equipment Systems and Installation – Provides guidance material for compliance with JAR 23.1309 based on FAA AC 23.1309.

Transport Canada Issue Paper IP-G-1 Edition 1 dated January 14, 2008 – Type Certification – Applicable Airworthiness Standards

Doc. No. CP-DA42-001 PSCP DA42 Lycoming IO-360 Engine Installation

Doc. No. CR-DA42-002 Compliance Report DA 42 Lycoming IO-360 Engine

Doc. No. 7.07.00 Chapter V004/1 - Report Means of Compliance DA 42 NG

Doc. No. 7.07.00 Chapter V004/5 – Project Description – DA 42 NG

(5) Flight Manual: EASA-Approved Airplane Flight Manual DA 42 Document No. 7.01.05-E – CAA Accepted as AIR 2942

> Transport Canada-Approved Aircraft Flight Manual DA42 L360 Document No. D42L-AFM-002 – CAA Accepted as AIR 3100

EASA-Approved Airplane Flight Manual DA 42 NG Document No. 7.01.15 – CAA Accepted as AIR 3967

EASA-Approved Airplane Flight Manual DA 42 NG Document No. 7.01.16 – CAA Accepted as AIR 3968 (applicable when design change MÄM 42-600 installed) (6) Operating Data for Aircraft:

(i) Maintenance Manual: Document No. 7.02.01 Airplane Maintenance Manual DA 42

Document No. D42L-AMM-001 Aircraft Maintenance Manual DA42 L360

Document No. 7.02.15 Airplane Maintenance Manual DA 42 NG

- *(ii) Current service Information:* Diamond Aircraft Industries DA 42 Service Bulletins/Service Information
- (iii) Illustrated Parts Catalogue: Document No. 7.03.1 DA 42 and DA 42-M IPC

The IPC for the DA 42 Series is now only online at <u>http://ipc.diamond-air.at/ipp/</u>

(7) Agreement from manufacturer to supply updates of data in (6) and (7):

Letter titled "Confirmation for Revision Service" from Harald Lackner, Office of Airworthiness, dated 21 Sept 2005. email from Diamond Industries Inc. Airworthiness Department dated 09.09.09

CAA 2171 from Diamond Chief, Office of Airworthiness dated 30 April 2020

All service publications are available on the website <u>www.diamondaircraft.com</u>

(9) Other information:

Garmin G1000 Cockpit Reference Guide for the Diamond DA42, Document Number 190-00406-02 Rev A April 2005.

Textron Lycoming Specification Number 2656-A Dated March 7, 2001 – Detail Spec. for Engine, Aircraft, Model IO-360-M1A 180 Horsepower Direct Drive

Doc. No. 7.11.01 & 11.11.01 – Diamond Aircraft Industries GmbH – DA 42 Series, DA 62 – Master Minimum Equipment List

## 5. New Zealand Operational Rule Compliance

Compliance with the retrospective airworthiness requirements of NZCAR Part 26 is a prerequisite for the grant of a type acceptance certificate.

#### **Civil Aviation Rules Part 26**

#### Subpart B – Additional Airworthiness Requirements

Appendix B – All Aircraft

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
B.1	Marking of Doors and Emergency Exits	To be determined on an individual aircraft basis
B.2	Crew Protection Requirements – CAM 8 Appdx. B # .35	Not Applicable – Agricultural Aircraft only

Compliance with the following additional NZ operating requirements has been reviewed and were found to be covered by either the original certification requirements or the basic build standard of the aircraft, except as noted:

#### **Civil Aviation Rules Part 91**

#### Subpart F – Instrument and Equipment Requirements

PARA:	REQ	UIREMENT:	MEANS OF COMPLIANCE:		
91.505	Shoulder Harness if Aero	batic; >10 pax; Flight Training	JAR §23.785 – See Flight Manual Section 7.6		
91.507	Pax Information Signs – Smoking, safety belts fastened		Not Applicable – Less than 10 passenger seats		
91.509	VFR Instruments and Equipment				
	(1) ASI	JAR §23.1303(a) – Std Fit * ¤	(8) Coolant Temp Gauge	Standard Fit * ¥	
	(2) Machmeter	N/A – No Mach limitations	(9) Oil Temperature	JAR §23.1305(c) – Std Fit * ¥	
	(3) Altimeter	JAR §23.1303(b) – Std Fit * ¤	(10) Manifold Pressure	JAR §23.1305(h) – See F-04	
	(4) Magnetic Compass	JAR §23.1303(c) – Std Fit *	(11) Cylinder Head	N/R – See CRI F-04	
	(5) Fuel Contents	JAR §23.1305(a) – Std Fit * ¥	Temp.	JAR §23.699(a)(2) [3 lights]	
	(6) Engine RPM	JAR §23.1305(d)(e) – Std Fit * ¥	(12) Flap Position	JAR 23.729(e) [ 3 lights]	
	(7) Oil Pressure	JAR §23.1305(b) – Std Fit * ¥	(13) U/c Position	JAR §23.1351(d) –Std Fit * ¥	
			(14) Ammeter/Voltmeter		
	0	on 2.13 Kinds of Operation for min			
	¤ Displayed on the Prima		layed on the Multi Function D	Display (MFD)	
91.511	Night VFR Instruments a				
	(1)Turn and Slip	Fitted as Std as part of PFD	(3) Anti-collision Lights	Fitted as Std * See FM §7.10.1	
	(2) Position Lights	Fitted as Std * See FM §7.10.1	(4) Instrument Lighting Fitted as Std * See FM §7.10.		
91.517	IFR Instruments and Equ				
	(1) Gyroscopic AH	Fitted as Std as part of PFD	(5) OAT	Fitted as Std as part of PFD	
	(2) Gyroscopic DI	Fitted as Std as part of PFD	(6) Time in hr/min/sec	Fitted as Std as part of PFD	
	(3) Gyro Power Supply	Accepted by EASA IFR TC	(7) ASI/Heated Pitot	Fitted as Std * See FM §7.11	
	(4) Sensitive Altimeter	PFD + backup altimeter std	(8) Rate of Climb/Descent   Fitted as Std as part of PFD		
91.519	IFR Communication and	Navigation Equipment	Operational requirement – Compliance as applicable		
91.523	Emergency Equipment				
	(a) More Than 10 pax – F		Not Applicable – Less than		
	- Fire Extinguishers per Table 8		Not Applicable – Less than		
		xe readily acceptable to crew	Not Applicable – Less than 20 passenger seats		
	(c) More than 61 pax – Portable Megaphones per Table 9		Not Applicable – Less than 61 passenger seats		
91.529	ELT - TSO C91a after 1/4/97 (or replacement)		To be determined on an individual aircraft basis		
91.531	Oxygen Indicators – Volume/Pressure/Delivery		Not fitted as standard ***		
91.533	Oxygen for Non-pressurised Aircraft				
	>30 min above FL100 – Supplemental for crew, 10% Pax;		Maximum operating altitude in Flight Manual is 18,000 ft.		
	Therapeutic for 3% of Pa		(5,486 m) – Oxygen system not fitted as standard		
		ental, Therapeutic, 120 l PBE	No Flight Manual Supplement in Flight Manual ***		
91.541	A	titude Reporting Equipment		- Compliance as applicable	
91.543	Altitude Alerting Device		Not Applicable – Not turbo		
91.545	Assigned Altitude Indicat			– Compliance as applicable	
A.15	ELT Installation Require	ments	To be determined on an in	dividual aircraft basis	

\*\*\* A continuous flow oxygen system for each pilot and passenger up to 18,000 ft. can be installed in accordance with Design Change Advisory No. OÄM 42-055/j, and Optional Service Bulletin OSB 42-023/1 or OSB 42NG-032.

#### **Civil Aviation Rules Part 135**

#### Subpart F – Instrument and Equipment Requirements

PARA:	REQUIREMENT:		MEANS OF COMPLIANCE:	
135.355	Seating/Restraints – Shoulder harness for flight-crew seats		See compliance with NZCAR §91.505 above	
135.357	Additional Instruments (Powerplant and Propeller)		JAR §23.1305 instruments fitted/propeller not reversible	
135.359	Night Flight	Landing light, Pax compartment	Operational requirement – Compliance as applicable	
135.361	IFR Operations	Speed, Alt, spare bulbs/fuses	Operational requirement – Compliance as applicable	
135.363	Emergency Equipment (Part 91.523 (a) and (b))		Operational requirement – Compliance as applicable	
135.367			Not Applicable – Less than 10 passenger seats	
135.369	Flight Data Recorder		Not Applicable – Less than 10 passenger seats	
135.371	Additional Attitude Indicator		Not Applicable – Not turbo jet or turbofan powered	

NOTES: 1. A Design Rule reference in the Means of Compliance column indicates the Design Rule was directly equivalent to the CAR requirement, and compliance is achieved for the basic aircraft type design by certification against the original Design Rule.

2. The CAR Compliance Tables above were correct at the time of issue of the Type Acceptance Report. The Rules may have changed since that date and should be checked individually.

3. Some means of compliance above are specific to a particular model/configuration. Compliance with Part 91/119 operating requirements should be checked in each case, particularly oxygen system capacity and emergency equipment.

### Attachments

The following documents form separate attachments to this report:

Copy of EASA Type Certificate/Type Certificate Data Sheet Number EASA.A.005 CAA Report – Interim Comments Type Acceptance of Diamond DA 42 Aircraft Diamond Compliance Report Doc 7.07.10 Chapter 0018/1 Operation in New Zealand DCR Doc No 7.07.01 Chapter 0018/23.562 Emergency Landing Dynamic Conditions

#### Sign off

David Gill Team Leader Aircraft Inspection

Checked – Tim Dutton Flight Test Engineer

## Appendix 1

#### List of Type Accepted Variants:

Model:	Applicant:	CAA	Work Request	: Date Granted:
DA 42	Diamond Aircraft Industries Gr	nbH	6/21B/13	10 February 2006
DA 42 "L360"	Diamond Aircraft Industries, In	C.	10/21B/3	9 September 2009
DA 42 NG	Diamond Aircraft Industries Gr	nbH	20/21B/16	15 October 2020

## Appendix 2

Three-view drawing Diamond DA 42 NG:

