



REPÚBLICA DE CHILE
DIRECCIÓN GENERAL DE AERONÁUTICA CIVIL

TYPE CERTIFICATE VALIDATION ACT

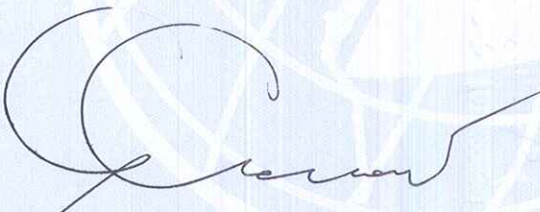
Nº: A – A89 – 03 / 10

15 July 2010

- 1.- In accordance with the records and documents submitted by GA8 Airvan Pty Ltd, domiciled in: P.O. Box 20, North Essendon, 3041 Victoria, Australia, it has been established that the aeronautical product identified below is of a design, materials, specifications, construction and appropriate performances for a safe operation and it satisfies the current requirements stated in the Chilean Civil Aviation Regulations.

PRODUCT	:	Airplane
MAKE	:	GA8 Airvan Pty Ltd
MODELS	:	GA8 and GA8-TC 320

- 2.- The Airworthiness Organization of the Chilean DGAC recognizes as valid the Type Certificate Nº VA503 and its related Data Sheet, revision 15, dated 27 April 2010, as issued by the Civil Aviation Safety Authority of Australia, for the airplanes above identified, in Normal Category, in accordance with the conditions and limitations prescribed in the Type Acceptance Data Sheet Nº A-A89-03/10 issued by this DGAC.


GUILLERMO GALLARDO A.
Jefe Sección Ingeniería


CARLOS ROJAS O.
Jefe Sub-Departamento
Aeronavegabilidad





REPUBLIC OF CHILE

DIRECCIÓN GENERAL DE AERONÁUTICA CIVIL

No. A-A89-03/10
Revision 1

GA8 Airvan Pty Ltd

GA8
GA8-TC 320

14 December 2010

TYPE ACCEPTANCE DATA SHEET No. A-A89-03/10

This data sheet, which is part of Type Certificate Validation Act No. A-A89-03/10, prescribes the conditions and limitations under which the product for which the Type Certificate No.VA503 issued by The Civil Aviation Safety Authority (CASA) of Australia meets the airworthiness requirements of the Republic of Chile.

Certificate Holder GA8 Airvan Pty Ltd
ACN 119 523 830
PO Box 20, North Essendon
Victoria, Australia 3041

I Model GA8. Approved in Normal Category 10th October 2000 by CASA.

Engine Textron Lycoming IO-540-K1A5

Engine Limits Take Off 2500 rpm and full throttle (275 hp), or
2700 rpm and full throttle (300 hp) – max 2 minutes
(See Note 5).
Maximum Continuous 2500 rpm and full throttle (275 hp)

Propeller Hartzell HC-C2YR-1BF/F8475R metal, constant speed
Diameter not over 2134 mm
not under 1981 mm

Hartzell HC-C3YR-1RF/F8068 metal, constant speed (See Note 8)
Diameter not over 2083 mm
not under 1981 mm

Serial Numbers Eligible: GA8-00-004 to GA8-03-025 upgraded to FAR Part 23 Amdt 54 status.
GA8-03-026 and subsequent.
GA8 aircraft with turbocharged engine option installed are eligible if Gippsland Aeronautics Engineering Release GA8-9671140 at latest issue has been complied with.

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II Model GA8-TC 320

Approved in Normal Category 9 February 2009 by CASA.

Engine	Textron Lycoming TIO-540-AH1A		
Engine Limits	Normal Take Off	2500 rpm and 38 in Hg MAP (300 HP)	
	Alternate Take Off	2500 rpm and 40 in Hg MAP below 5000' Pressure Altitude (See Note 7).	
	Maximum Continuous	2500 rpm at 38 inHg (300 hp)	
Propeller	Hartzell HC-C3YR-1RF/F8068 metal, constant speed		
	Diameter	not over	2083 mm
		not under	1981 mm
Serial Numbers Eligible:	GA8-TC-320-08-130 and subsequent.		

Data Pertinent to All Models

Fuel	100LL or 100/130 aviation gasoline		
Airspeed Limits (knots IAS)	Never exceed V_{ne}	185 KIAS	
	Max structural cruise V_{no}	143 KIAS	
	Manoeuvring V_a	121 KIAS	
	Max flaps extended V_{fe}	97 KIAS	
Centre of Gravity Limits	Forward Limit	+1219 mm aft of datum at 1089 kg or less +1422 mm aft of datum at 1814 kg Variation is linear between 1089 kg and 1814 kg.	
	Aft Limit	+1626 mm aft of datum at all weights	
	Datum	Fuselage firewall frame jacking points at fuselage station 0 (Stated arms are +ve aft; and -ve forward)	
Levelling Means	Longitudinal Marks (blind rivets) on the port fuselage wall Lateral Level across cockpit seat rails		
Maximum Weights	Take-off	1814 kg	
	Landing	1814 kg	
No. of Seats	Eight	Row 1 (Pilot row)	arm + 965 mm
		Row 2	+1772 mm
		Row 3	+2523 mm
		Row 4	+3247 mm

Maximum Baggage	Baggage Shelf	113kg	at +3763 mm
Aft Luggage	Bin	22kg	at +4623 mm
Fuel Capacity	Main wing tanks	two (one tank in each wing)	
	Total each tank	170 litres	at +1715 mm
	Useable each tank	166 litres	at +1715 mm
	Unusable each tank	4 litres	at +1829 mm
	Sump tank	9 litres	at +705 mm
	Sump tank capacity is designated unusable fuel.		
Oil Capacity	Total	11.4 litres	at -540 mm
	Unusable	2.6 litres	at -540 mm
Crosswind Component	Maximum demonstrated for take-off and landing		15 knots
Control Surface Deflections	Horizontal Stabiliser leading edge	Up	2.0° ± 0.5°
		Down	5.0° ± 0.5°
	- measured between the mid-section line of the stabiliser and the horizontal reference		
	Elevator trailing edge	Up	15.0° ± 0.5°
		Down	19.0° ± 0.5°
	- measured between the mid-section line of the elevator and the mid-section line of the horizontal stabiliser, with the stabiliser in the full leading edge down position		
	Aileron trailing edge	Up	17.0° ± 0.5°
		Down	16.0° ± 0.5°
	- measured between the under-surface of the aileron and the rear under-surface of the wing main plane		
	Rudder trailing edge	L & R	21.0° ± 0.5°
	Wing flaps	Retracted	0° ± 1°
		Take-off	14.0° ± 1°
		Landing	38.0° ± 1°
	All measurements refer to hinge line rotation.		

Type Design Data

For serial numbers GA8-00-004 to GA8-03-025

- (i) Engineering Release GA8-970001, Issue 5 or later approved revision, and
- (ii) Master Drawing GA8-010001, Issue 2 or later approved revision, GA8 General Assembly, and

- (iii) Pilot's Operating Handbook and Approved Flight Manual, document C01-01-01, dated 10 September 2001 or later approved revision; or for aircraft incorporating SB-GA8-2005-10, document C01-01-06, dated 8 August 2005 or later approved revision (see Note 5), and
- (iv) Service Manual document C01-00-01, Chapter 4 Airworthiness Limitations, dated 26 November 2001 or later approved revision and,
- (v) SB-GA8-2003-04, conversion of aircraft from CASA certificated FAR 23 Amendment 45/48 status to CASA certificated Amendment 54 status.

For serial numbers GA8-03-026 and subsequent,

- (i) Engineering Release GA8-970002, Issue 1 or later approved revision, and
- (ii) Master Drawing GA8-010001, Issue 3 or later approved revision, GA8 General Assembly, and
- (iii) Pilot's Operating Handbook and Approved Flight Manual, document C01-01-03, dated 14 March 2003 or later revision or, for aircraft incorporating SB-GA8-2005-10, document C01-01-07, dated 8 August 2005 or later approved revision, (see Note 5), and
- (iv) Service Manual document C01-00-03, Chapter 4 Airworthiness Limitations, dated 14 March 2003 or later approved revision.

Additional Type Design Data for Model GA8-TC 320:

- (i) Engineering Release GA8-970004, Issue 1 or later approved revision - GA8-TC 320 Master Data Package.
- (ii) Pilot's Operating Handbook and Approved Flight Manual, document C01-01-08, dated 23 January 2009 or later approved revision and
- (iii) Service Manual document C01-00-05, Chapter 4 Airworthiness Limitations, dated 19 December 2008 or later approved revision.

Additional Type Design Data for IFR approved aircraft

- (i) Engineering Release GA8-970003, Issue 1 or later approved revision
- (ii) Pilot's Operating Handbook and Approved Flight Manual as above. (See Notes 3 and 5)

Certification Basis:

1. Part 21 of the Civil Aviation Safety Regulations 1998, and
2. Federal Aviation Regulation, Part 23 at Amendment 48 for aircraft serial numbers GA8-00-004 to GA8-03-025.
3. Federal Aviation Regulations, Part 23 at Amendment 54. See Note 5 for noise certification.

Production Basis	Production Certificate No. 053049, dated 15 August 2003.
Equipment	<ol style="list-style-type: none"> 1. The CASA approved aircraft flight manual details required equipment for kinds of operations. 2. Other equipment may be required, to meet applicable operational regulations.
Placards	The placards detailed in the applicable CASA approved aircraft Pilot's Operating Handbook and Approved Flight Manual are required to be fitted.
Notes	<ol style="list-style-type: none"> 1. Weight and Balance. A current weight and balance report including a list of equipment included in the certificated empty weight, an approved load data sheet and an approved loading system, must be provided for each aircraft at the time of issue of a Certificate of Airworthiness. 2. Aircraft serial numbers GA8-00-004 to GA8-03-025 may have their certification standard upgraded to FAR 23 Amdt 54 by incorporating Service Bulletin SB-GA8-2003-04 (see Note 6). Aircraft so upgraded are required to have Pilot's Operating Handbook and Approved Flight Manual, document C01-01-03, dated 14 March 2003 or, for aircraft incorporating SB-GA8-2005-10, document C01-01-07, dated 8 August 2005, (see Notes 5 and 6). 3. Aircraft which are not manufactured with IFR capability may be modified to be IFR capable by complying with Service Bulletin SB-GA8-2003-08 (see Note 6). 4. Cargo Pod Installation options GA8-255004-11, GA8-255004-15, GA8-255004-17 or GA8-255004-19 is approved when incorporated in accordance with Service Bulletin SB-GA8-2004-14 (see Note 6). 5. Noise certification has been carried out by Airservices Australia. The certification basis for noise is as follows: <ol style="list-style-type: none"> (i) Aircraft with engine take-off limits of 2500 rpm meet ICAO Annex 16 Volume 1 Chapter 10, Third Edition, Amendment 6. These aircraft require aircraft flight manual C01-01-01 or C01-01-03 (see Type Design Data above), and (ii) Aircraft with engine take-off limits of 2700 rpm meet Federal Aviation Regulations Part 36, Appendix G, Amendment 24. These aircraft require aircraft flight manual C01-01-06 or C01-01-07 (see Type Design Data above). <p>Service Bulletins SB-GA8-2005-10 and SB-GA8-2005-16 (see Note 6) provide approved data to convert from one noise certification configuration to the other.</p>

6. Unless otherwise stated, later CASA approved documentation revisions are accepted as meeting type data requirements.
7. The TIO-540-AHIA has an alternate take-off rating of 40.0 in Hg at 2500 rpm limited to 5000 feet pressure altitude.
8. The optional Hartzell HC-C3YR-1RF/F8068 three blade propeller is approved when installed by Gippsland Aeronautics in accordance with Engineering Release GA8-9661149 (Option 149) at latest issue, or when incorporated on a specific aircraft serial number in accordance with Gippsland Aeronautics Service Bulletin GA8-SB-2009-62 at latest issue.

Revision History

Revision 7 was issued 14 March 2003 to correct mass arms, and to include the later design standard for serial number 026 and subsequent.

Revision 8 was issued 15 September 2003 to include IFR approval and reference to the production certificate.

Revision 9 was issued 25 October 2004 to include the Cargo Pod approval.

Revision 10 was issued to add an alternative noise certification that allows take-off at 2700 rpm and full throttle.

Revision 11 was issued due to a change of Type Certificate holder, from Gippsland Aeronautics Pty Ltd, to GA8 Airvan Pty Ltd.

Revision 12 was issued to incorporate new model GA8-TC 320, and minor editorial and formatting changes.

Revision 13 was issued to correct a minor typographical error on page 4, Additional Type Design Data for Model GA8-TC 320: Paragraph (iii) (date of issue of Service Manual C01-00-05 was changed from 19 December 2009 to 19 December 2008).

Revision 14 was issued to incorporate the optional Hartzell HC-C3YR-1RF/F8068 three blade propeller.

Revision 15 was issued to update Type Certificate Holder details and to incorporate corrections to the certification basis and GA8-TC 320 serial number eligibility.

Additional DGAC Data Pertinent to All Models

- Certification Basis
- DAR 08, Reglamento de Aeronavegabilidad.
 - DAN 21, Certificación de Productos y Partes.
 - The certification basis imposed by CASA is accepted by the DGAC of Chile in accordance with this Type Acceptance Data Sheet.
 - SB-GA8-2003-04, conversion of aircraft from CASA certificated FAR 23 Amendment 45/48 status to CASA certificated FAR 23 Amendment 54 status.
- Serial Numbers Eligible
- GA8-00-004 to GA8-03-025 upgraded to FAR Part 23 Amdt 54 status.
 - GA8-03-026 and subsequent.
 - GA8-TC-320-08-130 and subsequent.
- Production Basis
- In accordance with TC CASA No. VA503.

Import Requirements

An Export Certificate of Airworthiness endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for a Chilean Certificate of Airworthiness is made.

A Chilean Certificate of Airworthiness may be issued for aircraft only on the basis of an Export Certificate of Airworthiness granted by CASA of Australia or the State of Registry, including the following statement:

"The aircraft covered by this certificate has been inspected, tested and found to be in conformity with the approved type design as defined by the Chilean Type Certificate Validation Act N° A-A89-03/10 and it is in a condition for safe operation"

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CARLOS ROJAS
Jefe Subdepartamento
Aeronavegabilidad

