ANAC
ADMINISTRACION NACIONAL
DE AVIACION CIVIL
ARGENTINA

DIRECCION DE AERONAVEGABILIDAD - ARGENTINA

To: Gippsland Aeronautics
Latrobe Regional Airport, P.O. Box 881
Morwell 3840 Victoria
Australia

Attention: Mr. Gerhard Jordan
Senior Aeronautical Engineer

Reference: Type Certificate

Córdoba, November 3, 2009.-

Dear Mr. Jordan,

Please, find enclosed original Argentine Type Certificate No. AV- 0902 and associated Data Sheet and copy No. 001 of the Final Certification Report, F.C.R. No. 09-187.01 for your records.

Sincerely,

Ing. Mec. Aer. ABEL ENRIQUE GONTERO
Jefe de Dpto. de Certificación Aeronáutica
Dirección de Aeronavegabilidad - ANAC-

Departamento de Certificación Aeronáutica
Avda. Fuerza Aérea Argentina Km. 5 ½
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ADMINISTRACIÓN NACIONAL DE AVIACIÓN CIVIL

DIRECCIÓN DE AERONAVEGABILIDAD
DEPARTAMENTO DE CERTIFICACIÓN AERONÁUTICA

REPUBLICA ARGENTINA

TCDS No. AV-0902
GA8 Airvan (Pty) Ltd.
Rev. 0
GA8
GA8-TC320

October 26, 2009

TYPE CERTIFICATE DATA SHEET No. AV-0902

This data sheet, which is part of Type Certificate No. AV-0902 , prescribes conditions and limitations under which the product for which the type certificate was issued, meets the airworthiness requirements of the DNAR.

Type Certificate Holder	GA 8 Airvan (Pty) Ltd. P.O. Box 20 North Essendon 3041 VICTORIA Australia
Type Certificate Holder record	Gippsland Aeronautics Pty. Ltd. transferred TC Number: VA503 to GA8 Airvan (Pty) Ltd on 8 August, 2006.

I. GA8 (Normal Category) Approved October 13, 2009.

Engine	Textron Lycoming IO-540-K1A5 Disposición DNA No. 04/91 acknowledges original Type Certificate 1E4 issued by the FAA, dated March 1991.	
Engine Limits	Maximum Takeoff Power	2700 R.P.M. and 300 HP
	Maximum Continuous Power	2500 R.P.M. and 275 HP
Propeller and Propeller Limits	Hartzell HC-C2YR-1BF/F8475R metal constant speed Disposición DNA No. 27/09, dated October 14, 2009. Not over 84 inches: (2134 mm) diameter Not under 78 inches (1981mm) diameter No further reduction permitted Pitch settings at 30 in. sta.: High: 29±1° Low: 12±0.2°	

II. GA8-TC 320 (Normal Category) Approved October 13, 2009

Engine	Textron Lycoming TIO-540-AH1A Disposición DNA No. 04/91 acknowledges original Type Certificate E14EA issued by the FAA, dated March 1991.	
Engine Limits	Normal Takeoff	2500 RPM and 38 in HG (MAP (300 HP)
	Alternate Takeoff	2500 RPM and 40 in HG MAP below 5,000 feet Pressure Altitude (See Note 7)
	Maximum Continuous Power	2500 RPM at 38 in HG (300 HP)
Propeller and Propeller Limits	Hartzell HC-C3YR-1RF/F8068 metal constant speed Disposición ANAC No. 27/09, dated October 14, 2009. Not over 82 inches (2083 mm) diameter Not under 78 inches (1981mm) diameter. No further reduction permitted Pitch settings at 30 in. sta.: High: 29±1° Low: 12±0.2°	

DATA PERTINENT TO BOTH MODELS-GA8 and GA8-TC320

Fuel	100LL or 100/130 aviation gasoline	
Airspeed Limits (IAS)	Never exceed	V_{ne} 185 kts
	Max. Structural cruise	V_{no} 143 kts
	Manoeuvering	V_a 121 kts
	Max. flaps extended	V_{fe} 97 kts
Center of Gravity (C.G. Range)	Forward Limit: +48.0 inches (+1219mm) aft of datum at 2400 lbs. (1089 kg.) or less. +56.0 inches (+1422 mm) aft of datum at 4000 lbs. (1814 kg) Variation is linear between 2400 lbs. (1089 kg) and 4000 lbs. (1814 kg) Aft Limit: +64.0 inches (+ 1626 mm) aft of datum at 4000 lbs. (1814 kg.) or less.	
Empty Weight C.G. Range	None.	
Datum	Aft face of Fuselage firewall at fuselage station 0 (stated arms are positive aft; negative forward).	
Leveling Means	Longitudinal: Level between pop rivets so marked, on the left hand side of fuselage. Lateral: Level across floor at rear door.	
Maximum Weight	Take-off	4000 lbs. (1814 kg.)
	Landing	4000 lbs. (1814 kg.)
No. of seats	Eight (8) (2 at + 38.0 inches (+965 mm) aft of datum 2 at + 69.8 inches (+1772 mm) aft of datum 2 at +99.3 inches (+ 2523 mm) aft of datum 2 at + 127.8 inches (+3247 mm) aft of datum)	

Fuel Capacity	Main wing tanks	2 (1 tank each wing)
	Total each tank	44.9 US Gallons (170 liters) at +67.5 inches (+ 1715 mm)
	Useable each tank	43.8 US Gallons (166 liters) at + 67.5 inches (+1715 mm)
	Unusable each tank	1.1 US Gallons (4 liters) at + 72.0 inches (+1829 mm)
	Collector tank	Total capacity 2.4 US Gallons (9 litres) is unusable fuel at + 27.75 inches (+705 mm)

See NOTE 1 for data on weight and balance

Oil capacity	Total capacity	12 US Quarts (11.4 liters) at - 21.3 inches (-540 mm)
	Useable	9.25 US Quarts (8.8 liters) at -21.3 inches (-540 mm)

See NOTE 1 for data on weight and balance

Control Surface Movements	Aileron	Up	17°± 0.5°
		Down	16° ± 0.5°
	Elevator	Up	15° ± 0.5° (1)
		Down	19° ± 0.5° (1)
	Rudder	L & R	21° ± 0.5°
	Horizontal Stabilizer	Up	2° ± 0.5° (2)
		Down	5° ± 0.5° (2)
	Wing Flaps	Retracted	0° ± 1.0°
		Take-off	14° ± 1.0°
		Landing	38° ± 1.0°

(1) Elevator control surface movements measured between the chord line of the horizontal stabilizer with the horizontal stabilizer in the full leading edge down position.
(2) Horizontal stabilizer movement measured between the chord line of the Horizontal Stabiliser and the airplane horizontal reference.

Serial Numbers Eligible:

GA8 Model — GA8-00-004 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.

GA8-TC 320 Model — GA8-TC-320-08-130 and subsequent.

Import Requirements — For new or used aircraft, the import documentation to be sent to Argentina must include:

a) A CASA export Certificate of Airworthiness (C. of A.), signed by CASA or a designated representative, or
b) A Certificate of Airworthiness for Export signed by the Airworthiness Authority of the country with which Argentina has a Bilateral Airworthiness Agreement.

In the case of (a) or (b), the Certificate of Airworthiness (C. of A.) must contain the following statement:

Model GA8: Serials GA8-00-004 through GA8-03-025:

"The airplane covered by this certificate has been examined, tested and found to comply with the Master Drawing GA8-010001 and Engineering Release GA8-970001 at latest revision, and Gippsland Aeronautics Service Bulletins SB-GA8-2003-04 (if applicable) (See NOTE 9) and SB-GA8-2003-05 (See NOTE 9), approved under Type Certificate No. AV-0902 and to be in a condition for safe operation".

Gippsland Aeronautics Service Bulletins SB-GA8-2003-04 (if applicable) (See NOTE 9) and SB-GA8-2003-05 (See NOTE 9) must be accomplished before the issuance of the Argentine Certificate of Airworthiness.

Model GA8: Serials GA8-00-026 and subsequent:
"The airplane covered by this certificate has been examined, tested and found to comply with the Master Drawing GA8-010001 and Engineering Release GA8-970002 at latest revision, and Gippsland Aeronautics Service Bulletins SB-GA8-2003-05 (See NOTE 9), approved under Type Certificate No. AV-0902 and to be in a condition for safe operation".

Gippsland Aeronautics Service Bulletins SB-GA8-2003-05 (See NOTE 9) must be accomplished before the issuance of the Argentine Certificate of Airworthiness.

Model GA8 with turbocharged engine installation option:

"The airplane covered by this certificate has been examined, tested and found to comply with the Master Drawing GA8-010001 CASA approved revisions and Gippsland Aeronautics Engineering Release 9671140 at latest issue has been implemented by Gippsland Aeronautics, approved under Type Certificate No. AV-0902 and to be in a condition for safe operation".

Gippsland Aeronautics Engineering Release GA8-9671140 at latest issue must be accomplished, before the Type Certificate No. AV-0902 can be added to the aircraft data plate by the manufacturer.

Model GA8-TC320:

An Argentine airworthiness certificate may be issued on the basis of an Australian Export Certificate of Airworthiness signed by a reprersentative of the Civil Aviation Safety Authority (CASA) containing the following statement:
"The airplane covered by this certificate has been examined, tested and found to comply with the Gippsland Aeronautics Engineering Release 970004, Issue 1 or later approved under Type Certificate No. AV-0902 and to be in a condition for safe operation".

The Argentine airworthiness certification basis for this airplane type certificated under DNAR 21.29 and exported by the country of manufacture is DNAR 21.183(c).

c) For countries other than design countries, an Export Certificate of Airworthiness or similar document signed by the Airworthiness Authority of the Exporting country which must contain the following statement:

"The airplane covered by this certificate has been inspected, tested and found to be in conformity with the approved Type Design and is in a condition for safe operation". Additional Guidance is contained in DNA CA 21-23, Airworthiness Certification of Civil Aircraft, Engines, Propellers and Related Products imported into the Republic of Argentina

Certification Basis

DNAR Part 21, Section 21.29(b) as amended by 21-7 dated March 1995.

GA8 Model:

DNAR/FAR 23, dated December 18, 1964, with amendments 1 through 54 "Airworthiness Standards for Normal Category Airplanes".

DNAR/FAR 36.1 (a)(2), dated December 1, 1969 with amendments 1 through 24 "Noise Standards: Aircraft Type and Airworthiness Certification".

CASA originally type certificated this aircraft under TC number VA503. ANAC validated this product under Argentine TC Number AV-0902.

For aircraft eligible for IFR operations the certification basis is DNAR/FAR 23 dated December 18, 1964 with amendments 1 through 55 "Airworthinesss Standards for Normal Category Airplanes".

GA8-TC 320

DNAR/FAR 23, dated December 18, 1964, with amendments 1 through 55 "Airworthiness Standards for Normal Category Airplanes":

DNAR/FAR 36.1(a)(2), dated December 1, 1969 with amendments 1 through 28 "Noise Standards: Aircraft Type and Airworthiness Certification"

CASA originally type certificated this aircraft under TC number VA503. ANAC validated this product under Argentine TC Number AV-0902.

For aircraft eligible for IFR operations the certification basis is FAR 23 dated December 18, 1964 with amendments 1 through 55 "Airworthiness Standards for Normal Category Airplanes"

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane for certification.

For GA8 Model:

In addition to the approved Aircraft Flight Manual Report No. C01-01-04 dated May 29, 2003 or later approved revision version plus the Flight Manual Supplement for Argentina, Document Number C01-04-88 must be carried on aircraft.(See Note 5).

To be eligible for IFR operations, AFM Report No. C01-01-04 dated December 22, 2003 or later CASA approved versions must be carried on aircraft.

IFR required equipment is shown in AFM Limitations Section 2, table 2-11, dated December 22, 2003 or later revisions, plus the Argentine Regulation requirements.

Instructions for Continued Airworthiness (ICA) (Service Manual) document C01-00-04 (See Note 3 and 4).

For GA8-TC 320 Model:

Aircraft Manual Report No. C01-01-09 dated July 31, 2009 or later approved version plus the Flight Manual Supplement for Argentina, Document Number C01-04-88 must be carried (See Note 5).

Instructions for Continued Airworthiness (ICA) (Service Manual) document C01-00-06 dated March 20, 2009 or later revisions (See Note 3 and 4).

Service Information

Each of the documents listed below must state that it is approved by the Australian Civil Aviation Safety Agency (CASA):

- Aircraft flight manuals and
- Airworthiness Limitations Section of the Service Manual

The ANAC accepts such documents and considers them ANAC-approved for type design data only, unless one of the following conditions exists:

- The documents change the limitations, performance or procedures of the ANAC approved manuals; or
- The documents make acoustical or emissions changes to this product's Argentine type certificate as defined in DNAR 21.93.

ANAC may delegate on case-by-case to CASA to approve on behalf of the ANAC for the Argentine type certificate. If this is the case it will be noted on the document.

NOTES

NOTE 1. A current weight and balance report, including a list of equipment included in the certificated empty weight and loading instructions when necessary, must be provided for each airplane at the time of original certification.

The certificated empty weight and the corresponding center of gravity location must include full oil [22.5 lbs. (10.3 kg) at -21.3 inches (-540 mm)] and unusable fuel [12.7 lbs. (5.7 kg) in main tanks at +79.6 inches (+2022 mm) and 14.3 lbs. (6.5 kg in collector tank at + 27.75 inches (+705mm)]

NOTE 2. All required placards are contained in Chapter 2 of the Airplane Flight Manual, Report C01-01-04 and C01-01-09 for both cases plus the Flight Manual Supplement, Document C01-04-88 for Argentina and C01-00-06 and must be installed in the appropriate locations.

NOTE 3. Service life of structural components are listed in the Airworthiness Limitations Section, Chapter 4 of the Airplane Service Manual, Report No. C01-00-04 (GA8) and C01-00-06 (GA8-TC320). The Airworthiness Limitations Section was approved by CASA and ANAC. Revisions to this section must be approved by CASA and ANAC.

NOTE 4. Instructions for continued airworthiness are contained in the Airplane Service Manual, Report No. C01-00-04. The instructions for continued airworthiness for aircraft eligible for IFR operations are contained in the Airplane Service Manual, Report No. C01-00-04 dated December 22, 2003 or later CASA approved version.

NOTE 5. The Airplane Flight Manual, Report No. C01-01-04 (GA8) and C01-01-09 (GA8-TC 320) plus the Flight Manual Supplement Document Number C01-04-88 was approved by CASA and ANAC. Revisions to this report may be approved by CASA on behalf of ANAC.

NOTE 6. Airplanes must comply with the requirements of Gippsland Aeronautics Service Bulletin SB-GA8-2003-08, Issue 2, dated December 22, 2003 or later CASA approved revisions, to be eligible for IFR operations. Aircraft should also rely on the additional equipment required by the RAAC (Argentine regulations).

NOTE 7. The TIO-540-AH1A has an alternate takeoff rating of 40.0 in Hg at 2500 RPM limited to 5000 feet pressure altitude.

NOTE 8. Cargo Pod, part number GA8-255004-17 (standard) or GA8-255004-19 (Optional rear Door) is approved equipment on the Model GA89-TC 320 when installed in accordance with the latest issue of Gippsland Aeronautics Service Bulletin SB-GA8-2004-14 and when Flight Manual Supplement C01-04-34 at latest issue is inserted into the aircraft's approved flight manual.

NOTE 9. Service Bulletins SB-GA8-2003-04 and SB-GA8-2003-05 are accepted by ANAC but with the following modifications:

SB-GA8-2003-04: Loading Placards Replacement, under item 4 should be in Spanish or Spanish/English (Bilingual).

-SB-GA8-2003-05: ELT must comply with RAAC 91.207.

NOTE 10 The interior configuration is contained in the Flight Manual Document C01-01-04-GA8, C01-01-09-GA8 TC320.

NOTE 11. Service Manual Supplement GA8 and GA8-TC 320, Doc C05-96-10 should be included along with the following Service Manuals: C01-00-04, Model GA8 Service Manual and C01-00-06, Model GA8-TC 320 Service Manual.

END