European Aviation Safety Agency



TYPE CERTIFICATE

EASA.IM.A.042

This Type Certificate is issued by EASA, acting in accordance with Regulation (EC) No. 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation and in accordance with Commission Regulation (EC) No. 1702/2003 to

GA8 AIRVAN Pty. Ltd.

C/- GIPPSAERO Pty. Ltd.
LATROBE REGIONAL AIRPORT
AIRFIELD ROAD
TRARALGON VIC 3844
AUSTRALIA

and certifies that the product type design listed below complies with the applicable Type Certification Basis and environmental protection requirements when operated within the conditions and limitations specified on the associated:

Type Certificate Data Sheet Number: EASA.IM.A.042

Type Design - Model:

odei.

GA8

Date of issue: 29 July 2005

Variant: GA8-TC 320 Date of issue: 07 October 2009

For the European Aviation Safety Agency,

Date of issue: 21.06.2011

Roger HARDY Certification Manager General Aviation



European Aviation Safety Agency

EASA TYPE CERTIFICATE DATA SHEET

EASA.IM.A.042 GA8 - Series

Type Certificate Holder:

GA8 Airvan Pty Ltd

C/- GippsAero Pty Ltd Latrobe Regional Airport Airfield Road Traralgon Victoria 3844 AUSTRALIA

For models: GA8

GA8-TC 320

Issue 07: 28-Aug-2012



CONTENT

SECTION A: GA8

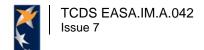
- A.I. General
- A.II. Certification Basis
- A.III. Technical Characteristics and Operational Limitations
- A.IV. Operating and Service Instructions
- A.V. Notes

SECTION B: GA8-TC 320

- B.I. General
- B.II. Certification Basis
- B.III. Technical Characteristics and Operational Limitations
- B.IV. Operating and Service Instructions
- B.V. Notes

ADMINISTRATIVE SECTION

- I. Acronyms
- II. Type Certificate Holder Record
- III. Change Record



Section A: GA8

A.I. General

1. a) Type: GA8
b) Model: GA8
c) Variant: ---

2. Airworthiness Category: Normal

3. Type Certificate Holder: GA8 Airvan Pty Ltd

C/- GippsAero Pty Ltd Latrobe Regional Airport

Airfield Road

Traralgon Victoria 3844

Australia

4. Manufacturer: GippsAero (Pty) Ltd

PO Box 881 Morwell 3840 Victoria Australia

5. Certification Application Date: 26-Sep-2003

6. CASA Australia Certification Date: 10-Oct-2000

7. EASA Certification Date: 29-Jul-2005

A.II. Certification Basis

1. Reference Date for determining the applicable requirements: 28-Apr-1993

2. (Reserved)

3. (Reserved)

4. Certification Basis: As defined in CRI A-01, latest Issue, and below

5. Airworthiness Requirements:

Serial Nos GA8-00-004 to GA8-03-025 FAR Part 23 at Amendment 48, except

paragraph 23.629 which is at Amendment 45

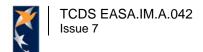
Serial Nos GA8-03-026 on FAR Part 23 at Amendment 54

6. Requirements elected to comply: None

7. EASA Special Conditions: CRI A-03, Rpm red line for noise certification

CRI O-08, Usage of aeroplanes for parachuting activities (see Note 9)

8. EASA Exemptions: None



9. EASA Equivalent Safety Findings: None

EASA Environmental Standards: Appl. chapter of ICAO, Annex 16, Vol. 1

(see TCDSN)

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition:

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

- (i) Engineering Release GA8-970001, Issue 5,
- (ii) Master Drawing GA8-010001, Issue 2, General Assembly GA-8 Aircraft, and
- (iii) Pilot's Operating Handbook and Approved Flight Manual, document C01-01-01, with Amendment dated 31 May 2005 or later CASA approved revision.
- (iv) Service Manual document C01-00-01, Chapter 4 Airworthiness Limitations, 26 November 2001 or later CASA approved revision.

For serial numbers GA8-03-026 and up

- (i) Engineering Release GA8-970002, Issue 1,
- (ii) Master Drawing GA8-010001, Issue 3, General Assembly GA-8 Aircraft, and
- (iii) Pilot's Operating Handbook and Approved Flight Manual, document C01-01-03, with Amendment dated 31 May 2005 or later CASA approved revision.
- (iv) Service Manual document C01-00-03, Chapter 4 Airworthiness Limitations, 14 March 2003 or later CASA approved revision.

Additional Type Design Data for IFR approved aircraft:

For serial all numbers:

- (i) Service Bulletin SB-GA8-2003-08
- 2. Description: Single engine, 8-seater strut braced high wing aeroplane, all metal construction,

fixed tricycle landing gear.

3. Equipment: Equipment list of Section 20.18 of Australia CAO 20.18

AFM as applicable see item 1 above.

4. Dimensions:

 Span
 12.41 m

 Length
 8.95 m

 Height
 3.89 m

 Wing Area
 19.85 m²

5. Engine Type: Textron Lycoming IO-540-K1A5

5.1 Engine Limits: Emergency use only 2700 rpm

Max take-off rotational speed 2500 rpm Max continuous rotational speed 2500 rpm

For other engine limits refer to AFM, Document. No. C01-01-03, Section 2

6. (Reserved)

7. Propeller:

7.1.1 Propeller Type Hartzell HC-C2YR-1BF/F8475R metal

7.1.2 Settings constant speed; Pitch stops: 12° ±0.2° Low; 29° High

7.1.3 Diameter 2134 mm maximum, 1981 mm minimum

or

7.2.1	Propeller Type	Hartzell HC-C3YR-1RF/F8068 metal	(see Note 10)
7.2.2	Settings	constant speed; Pitch stops: 12.8° ±0.2°	Low; 29° High

7.2.3 Diameter 2083 mm maximum, 1981 mm minimum

8. Fluids:

8.1 Fuel: AVGAS 100 LL or 100/130

8.2 Oil: Oils conforming to MIL-L-6082 and MIL-L-22851

For more details see AFM, Report No. C01-01-03, Section 2

9. Fluid capacities:

9.1 Fuel Capacity Main wing tanks two (one tank in each wing)

Total each tank
Useable each tank
Unusable each tank

Sump tank 9 litres at + 705 mm

Total capacity is designated unusable fuel.

9.2 Oil: Total: 11.5 litres at -540 mm

Unusable: 2.6 litres at -540 mm

Minimum: 2.0 litres at -540 mm

10. Air Speeds:

11. Maximum Operating Altitude: 20,000 feet.

12. All Weather Capability:

No AWO categories applicable.

VFR (Day and night), IFR

13. Maximum Masses:

Take-off 1814 kg Landing 1814 kg

14. Centre of Gravity Range:

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 linear between 1089 kg to 1814 kg

Aft Limit +1626 mm aft of datum at all weights

15. Datum Fuselage firewall frame jacking points at fuselage station 0

(Stated arms are +ve aft; and -ve forward)

16. (reserved)

17. Levelling Means Longitudinal Marks (blind rivets) on the port fuselage wall

Lateral Level across cockpit seat rails

18. Minimum Flight Crew: 1 (Pilot)

Maximum Seating Capacity:
 8 (incl. Pilot)

Arm

Row 1 (Pilot row) + 965 mm Row 2 +1772 mm Row 3 +2523 mm Row 4 +3247 mm

20. (Reserved)

21. Baggage / Cargo Compartments Location Maximum Load

Maximum Baggage Shelf 113kg at +3763 mm

Aft Luggage Bin 22kg at +4623 mm



22. Wheels and Tyres

Nose Wheel Tyre Size Main Wheel Tyre Size

see AFM, Section 7.7 see AFM, Section 7.7

A.IV. Operating and Service Instructions

1. Aeroplane Flight Manual (AFM) see A.III item 1 for applicability according to serial

number and IFR standard.

2. Aeroplane Maintenance Manual (AMM) (see A.III item 1)

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

Service Manual document C01-00-01

For serial numbers GA8-03-026 and up

Service Manual document C01-00-03

A.V. Notes

- 1. Serial numbers eligible: GA8-00-004 and subsequent
- 2. (Deleted)
- 3. Equipment
 - 1. The CASA approved aircraft flight manual details equipment required for kinds of operations.
 - 2. Other equipment, as required by applicable operational regulations.
- 4. Placards

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

Document C01-01-01 and drawing GA8-112011 Placards, Aircraft General

For serial numbers GA8-03-026 and up

Document C01-01-03 and drawing GA8-112011 Placards, Aircraft General

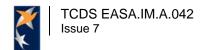
5. Weight and Balance

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.

- 6. Aircraft serial numbers GA8-00-004 to GA8-03-025 may be upgraded to FAR 23 Amdt 54 standard by incorporating GippsAero Service Bulletin SB-GA8-2003-04.
- Aircraft which are not manufactured as IFR capable may be modified to be IFR capable by complying with GippsAero Service Bulletin SB-GA8-2003-08, Issue 1, dated 15 September 2003.
- 8. Service Bulletin SB-GA8-2005-17 installs rpm gauge markings with red line at 2500 rpm and is required for EASA certification.
- 9. Usage of the aeroplane for parachuting activities

For parachuting activities the GA8 must be equipped with GippsAero Engineering Release GA8-965201, "Option 2 — Wind Deflector". Flight Manual Supplements Doc. No. C01-01-01, Supplement 1, "In Flight Rear Door Open Operations", Amendment 0 or later, and Supplement 2, "Parachut Operations", Amendment 5 or later, must be used.

For operational approval the competent Authority for Flight Operations must be contacted.



10. The optional Hartzell HC-C3YR-1RF/F8068 three blade propeller is approved when installed by GippAero in accordance with Engineering Release GA8-9661149 (Option 149) at latest issue, or when incorporated on a specific aircraft serial number in accordance with GippsAero Service Bulletin GA8-SB-2009-62 at latest issue.

For operation with Hartzell HC-C3YR-1RF/F8068 three blade propeller Flight Manual Supplement C01-04-81 is applicable

11. Optional installation of a stretcher

Optional AIRVANtage PL150 Stretcher System is approved when installation is done in compliance with Service Bulletin SB-GA8-2011-72 (Engineering Release GA8-980072). Operation is to be done in accordance with Flight Manual Supplement, Doc. No. C01-04-107. Maintenance is to be done in accordance with Component Maintenance Manual, Doc. No. C01-25-02.

The use of the transit seat installed together with the stretcher is not permitted for take-off and landing



Section B: GA8-TC 320

B.I. General

1. a) Type: GA8

b) Model: GA8-TC 320

c) Variant: ---

2. Airworthiness Category: Normal

3. Type Certificate Holder: GA8 Airvan Pty Ltd

C/- GippsAero Pty Ltd Latrobe Regional Airport

Airfiled Road

Traralgon Victoria 3844

Australia

4. Manufacturer: GippsAero (Pty) Ltd

PO Box 881 Morwell 3840 Victoria Australia

5. Certification Application Date: 11-Feb-2009

6. CASA Australia Certification Date: 09-Feb-2009

7. EASA Certification Date: 07-Oct-2009

B.II. Certification Basis

1. Reference Date for determining the applicable requirements: 28-Apr-1993

2. (Reserved)

3. (Reserved)

4. Certification Basis: As defined in CRI A-01, latest Issue, and below

5. Airworthiness Requirements:

Serial Nos GA8-08-130 and subsequent CS23 Ammendment 1

Requirements elected to comply: as under B.II.5

7. EASA Special Conditions: CRI O-08, Usage of aeroplanes for parachuting

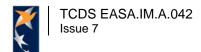
activities (see Note 6)

8. EASA Exemptions: None

9. EASA Equivalent Safety Findings: None

10. EASA Environmental Standards: Applicable chapter of ICAO, Annex 16, Vol. 1,

(see TCDSN)



B.III. Technical Characteristics and Operational Limitations

1. Type Design Definition:

For serial numbers GA8-TC 320-08-130 and subsequent

- (i) Engineering Release GA8-970004, Issue 1 or later approved revision,
- (ii) Master Drawing GA8-010003, Issue 1, General Assembly GA-8 Aircraft or later approved revision, and
- (iii) Pilot's Operating Handbook and Approved Flight Manual, document C01-01-08, with Amendment dated 9 February 2009 or later EASA approved revision.
- (iv) Service Manual document C01-00-05, Chapter 4 Airworthiness Limitations, 20 March 2009 or later EASA approved revision.

Additional Type Design Data for IFR approved aircraft:

For serial all numbers:

(i) Service Bulletin SB-GA8-2003-08

2. Description: Single engine, 8-seater strut braced high wing aeroplane, all metal construction,

fixed tricycle landing gear.

3. Equipment: Equipment list of Section 20.18 of Australia CAO 20.18

AFM as applicable see item 1 above.

4. Dimensions:

 Span
 12.41 m

 Length
 8.95 m

 Height
 3.89 m

 Wing Area
 19.85 m²

5. Engine: Textron Lycoming TIO-540-AH1A

5.1 Engine Limits: Max take-off rotational speed 2500 rpm

Max continuous rotational speed 2500 rpm

Maximum manifold pressure

at 5000 ft and below 40 inHg above 5000 ft 38 inHg

For other engine limits refer to AFM, Document. No. C01-01-08, Section 2

6. (Reserved)

7. Propeller: Hartzell HC-C3YR-1RF/F8068 metal

7.1 Settings constant speed; Pitch stops: 14.5° ±0.2° Low; 29° High

7.2 Diameter 2083 mm maximum, 1981 mm minimum

8. Fluids:

8.1 Fuel: AVGAS 100 LL or 100/130

8.2 Oil: Oils conforming to MIL-L-6082 and MIL-L-22851

For more details see AFM, Report No. C01-01-08, Section 2

9. Fluid capacities:

9.1 Fuel Capacity Main wing tanks two (one tank in each wing)

Total each tank
Useable each tank
Unusable each tank

Sump tank 9 litres at + 705 mm

Total capacity is designated unusable fuel.

9.2 Oil: Total: 11.5 litres at -540 mm

Unusable: 2.6 litres at -540 mm Minimum: 2.0 litres at -540 mm

10. Air Speeds: Never exceed speed, V_{NE} 185 kt IAS Maximum structural cruising speed, V_{NO} 143 kt IAS

Design Manoeuvring Speed, V_A
Flap Extended Speed, V_{FE}

121 kt IAS
97 kt IAS

or, for aircraft incorporating SB-GA8-2011-65 (see Note 8.)

Never exceed speed, V_{NE} 190 kt IAS Maximum structural cruising speed, V_{NO} 147 kt IAS Design Manoeuvring Speed, V_{A} 121 kt IAS Flap Extended Speed, V_{FE} 100 kt IAS

11. Maximum Operating Altitude: 20,000 Feet

12. All Weather Capability: No AWO categories applicable. VFR (Day and night), IFR

13. Maximum Masses: Take-off 1814 kg
Landing 1814 kg

or, for aircraft incorporating SB-GA8-2011-65 (see Note 8.)

Take-off 1905 kg Landing 1814 kg

14. Centre of Gravity Range:

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

or Centre of Gravity Limits for aircraft incorporating SB-GA8-2011-65 (see Note 8.)

Forward Limit +1219 mm aft of datum at 1089 kg or less

+1448 mm aft of datum at 1905 kg Variation is linear between 1089 kg and 1905 kg.

Aft Limit +1626 mm aft of datum at all weights

15. Datum Fuselage firewall frame jacking points at fuselage station 0

(Stated arms are +ve aft; and -ve forward)

16. (reserved)

17. Levelling Means Longitudinal Marks (blind rivets) on the port fuselage wall

Lateral Level across cockpit seat rails

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger Seating Capacity: 8 (incl. Pilot)

 Station
 Arm

 Row 1 (Pilot row)
 + 965 mm

 Row 2
 +1772 mm

 Row 3
 +2523 mm

 Row 4
 +3247 mm

20. (Reserved)

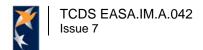
21. Baggage / Cargo Compartments Location Maximum Load

Maximum Baggage Shelf 113kg at +3763 mm

Aft Luggage Bin 22kg at +4623 mm

22. Wheels and Tyres

Nose Wheel Tyre Size see AFM, Section 7.7 Main Wheel Tyre Size see AFM, Section 7.7



B.IV. Operating and Service Instructions

1. Aeroplane Flight Manual (AFM) GA8-TC 320 Flight Manual C01-01-08, in conjunction

with

GA8-TC 320 Flight Manual Supplement, C01-04-92, "Operation of Aircraft registered in EASA Member

States"

2. Aeroplane Maintenance Manual (AMM) GA8-TC 320 Service Manual Amdt 54

CASA C01-00-05 or later Amendment

B.V. Notes

1. Serial numbers eligible: GA8-08-130 and subsequent. Other serial numbers are eligible when

modified under Engineering Release GA8-9671140 by GippsAero.

- 2. (reserved)
- 3. Equipment
 - 1. The CASA approved aircraft flight manual details equipment required for kinds of operations.
 - 2. Other equipment, as required by applicable operational regulations.
- Placards

Document C01-01-08, drawing GA8-112011 and drawing GA8-113031.

5. 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.

6. Usage of the aeroplane for parachuting activities

For parachuting activities the GA8-TC 320 must be equipped with GippsAero Engineering Release GA8-965201, "Option 2 – Wind Deflector". Flight Manual Supplements Doc. No. C01-01-01, Supplement 1, "In Flight Rear Door Open Operations", Amendment 0 or later, and Supplement 2, "Parachut Operations", Amendment 5 or later, must be used.

For operational approval the competent Authority for Flight Operations must be contacted.

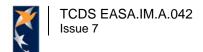
7. Optional installation of a stretcher

Optional AIRVANtage PL150 Stretcher System is approved when installation is done in compliance with Service Bulletin SB-GA8-2011-72 (Engineering Release GA8-980072). Operation is to be done in accordance with Flight Manual Supplement, Doc. No. C01-04-107. Maintenance is to be done in accordance with Component Maintenance Manual, Doc. No. C01-25-03

The use of the transit seat installed together with the stretcher is not permitted for take-off and landing.

8. GippsAero Engineering Release GA8-980065, issue 5 or later (covering GippsAero Service Bulletin SB-GA8-2011-65) incorporates features into the GA8-TC 320 that permit operations at the increased maximum take-off mass.

Flight Manual Supplement Doc. No. C01-04-78 is required.



ADMINISTRATIVE SECTION

I. Aconyms

None

II. Type Certificate Holder Record

Company changed from Gippsland Aeronautics (Pty) Ltd

PO Box 881 Morewell 3840 Victoria Australia

to

GA8 Airvan (Pty) Ltd

PO Box 20 North Essendon 3041 Victoria Australia

to

GA8 Airvan Pty Ltd C/- GippsAero Pty Ltd Latrobe Regional Airport

Airfield Road

Traralgon Victoria 3844

Australia



III. Change Record

Issue	Date	Changes	
1	29-Jul-2005	- Initial Issue of TCDS	
2	07-Oct-2009	- TC holder updated - Type data for IFR operation corrected - Maximum operating altitude corrected - Reference about wheel size added - Note 2 deleted (noise is stated in TCDSN) - Minor corrections and improvements - New variant GA8-TC 320 added - TCDS re-formatted accordingly	
3	16-Dec-2009	- page 1: Updated - page 3: CRI A-08 added - page 4: Reference to TCDSN added - page 6: Note 9 for parachuting activities added - page 7: CRI A-08 added, reference to TCDSN added - page 10: Note 6 for parachuting activities added - page 11: Updated	
4	17-Sep-2010	 - all pages: changed to new format with necessary adaptions - page 4: new, alternate propeller incorporated - page 7: new Note 10 incorporated - page 12: TC Holder Record incorporated Change Record updated 	
5	21-Jun-2011	- page 1, 3, and 8: changed name of TC holder incorporated - page 11: Doc. no. corrected to C01-04-92 - page 12: TCH Record updated - page 13: Change Records updated	
6	5-Jul-2011	 - page 1: updated - page 7: Note 11 for operation with stretcher added - page 11: Note 7 for operation with stretcher added - page 13: Change Records updated 	
7	28-Aug-2012	- page 1: updated - page 3: A.I.4; Manufacturer's name updated - page 4: A.III.5; AFM Doc.No. corrected A.III.7; updated for pitch stop setting per CASA TCDS - page 6 & 7: A.V; Company's name updated (6., 7., 9., 10.) - page 8: B.II.4; Manufacturer's name updated - page 9: B.III.7; updated for pitch stop setting per CASA TCDS - page 10: B.III.10; New Air Speeds for a/c with incresed MTOM added B.III.13; Increased MTOM included B.III.14; New CG Limits for a/c with increased MTOM added - page 11: B.V.1 & B.V.6; Company's name updated B.V.8; Note 8 added for operation with increased MTOM - Change Records updated	