



Australian Government

Civil Aviation Safety Authority

Type Certificate

Number: VA519 Issue 1

Pursuant to regulation 21.021 of the Civil Aviation Safety Regulations 1998, this Type Certificate is issued to GA200 Pty Ltd, in respect of the GA200 and GA200C aircraft.

This certificate is valid until it is suspended or cancelled by the Civil Aviation Safety Authority. The basis of certification is as described in type certificate data sheet number VA519.

Date of Application (Certificate of Type Approval):	3 February 1989
Date of Issue (Certificate of Type Approval No. 83-6):	1 March 1991
Issue 1 (Re-issued under CASR Part 21):	8 August 2006

A handwritten signature in black ink is written over a circular official seal. The seal contains the text 'CIVIL AVIATION SAFETY AUTHORITY' and 'AUSTRALIA'.

Eugene Paul Holzapfel
Delegate of the Authority



No	VA519
Revision	11
Aircraft	Gippsland Aeronautics
GA200	
Date	28 September 2011

TYPE CERTIFICATE DATA SHEET

This data sheet, which is part of Type Certificate No. VA519, lists the conditions and operational limitations under which the subject aircraft meets the airworthiness requirements of the Civil Aviation Safety Authority.

Certificate Holder GA200 Pty Ltd
ACN 119 523 821
c/- GippsAero Pty Ltd
Latrobe Regional Airport
Airfield Rd
Traralgon, VIC, Australia

I Model GA200 Approved in normal and restricted categories 1st March 1991 (See Note 3)

Engine Textron Lycoming O-540-A1D5 or O-540-H2A5

Engine Limits 2575 RPM and 250 BHP for all operations.

Fuel 100LL or 100/130 aviation gasoline

Propeller McCauley 1A200/FA8452 metal, fixed pitch

Diameter	Not over	2134 mm
	Not under	2090 mm
Pitch:	1320 mm at 0.75 radius	
Maximum static RPM (full throttle):		
	Not over	2450
	Not under	2350

Airspeed Limits	Never exceed V_{ne}	138 KIAS
	Max structural cruise V_{no}	111 KIAS
	Manoeuvring V_a	107 KIAS
	Max flaps extended V_{fe}	97 KIAS

Centre of Gravity Limits	Forward Limit	+965 mm aft of datum at 862 kg or less
		+991 mm aft of datum at 1315 kg
	Variation is linear between 862 kg and 1315 kg	
	Aft Limit	+1118 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	Longitudinal	Top longerons horizontal at the fuselage cockpit	
	Lateral	Level across top longerons at the fuselage cockpit	
Certification Weights	Max Take-off	1315 kg	
	Max Landing	1315 kg	
Hopper Limits	544 kg at +1088 mm		
No. of Seats	Two	Pilot	arm +2134 mm
		Second occupant	+2163 mm
Fuel Capacity	Main wing tanks	two (one tank in each wing)	
	Total each tank	105 litres	at +1303 mm
	Useable each tank	100 litres	at +1300 mm
	Unusable each tank	5 litres	at +1376 mm
	Collector tank	12 litres	at + 302 mm
	Total collector 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 for take-off and landing		15 knots
Control Surface Deflections	Elevator trailing edge	Up	27.0° ± 1.0°
		Down	20.0° ± 1.0°
	- measured between the mid-section line of the elevator and the mid-section line of the horizontal stabiliser		
	Aileron trailing edge	Up	24.0° ± 1.0°
		Down	24.0° ± 1.0°
	- measured between the under-surface of the aileron and the rear under-surface of the wing main plane		
	Rudder trailing edge	L & R	22.0° ± 1.0°
	Wing flaps	Retracted	0° ± 1.0°
		Take-off	15.0° ± 1.0°
		Landing	38.0° ± 1.0°
Serial numbers eligible	All measurements refer to hinge line rotation.		
	GA200-9101 and subsequent		
Type Design Data	(i) (a) For serial numbers 200-9101 to 200-9416		
	- Engineering Release GA200-970001 Issue 1, or		
	(b) For serial numbers 200-9417 and subsequent		

- Engineering Release GA200-970002 Issue 1
- and
- (ii) (a) For serial numbers 200-9101 to 200-9416
 - Master Drawing GA200-010001 Issue 2 *General Assembly GA200 Aircraft*, or
- (b) For serial numbers 200-9417 and subsequent
 - Master Drawing GA200-010101 Issue 1 *General Assembly GA200 Aircraft*,
- and
- (iii) *Pilot's Operating Handbook and Approved Flight Manual*,
 - report B01-01-01, amendment 0 (initial issue)
- and
- (iv) Service Manual document B01-00-11, Chapter 4 *Airworthiness Limitations*, dated 30 Jan 91.
(See Note 4).

II Model GA200C

Approved in the restricted category 3rd April 1998

Engine	Textron Lycoming IO-540- K1A5, or Textron Lycoming IO-540- K1C5 modified in accordance with Edge Aviation EO No. EA001001 Issue 3	
Engine Limits	2700 RPM and 300 BHP for all operations	
Fuel	100LL or 100/130 aviation gasoline	
Propeller	Hartzell HC-C2YR-1BF/F8475R metal, constant speed	
	Diameter	Not over 2134 mm Not under 1981 mm
	Maximum RPM:	2700
Airspeed Limits	Never exceed V_{ne}	144 KIAS
	Max structural cruise V_{no}	115 KIAS
	Manoeuvring V_a	115 KIAS
	Max flaps extended V_{fe}	97 KIAS
Centre of Gravity Limits	Forward Limit	+965 mm aft of datum at 862 kg or less +991 mm aft of datum at 1524 kg
	Variation is linear between 862 kg and 1524 kg	
	Aft Limit	+1097 mm aft of datum at 1524kg +1118 mm aft of datum at 1315kg or less
	Variation is linear between 1315kg and 1524 kg	
Datum	Fuselage firewall frame jacking points at fuselage station 0 (Stated arms are +ve aft; and -ve forward)	
Levelling	Longitudinal	Top longerons horizontal at the fuselage cockpit
	Lateral	Level across top longerons at the fuselage cockpit.

Certification Weights	Max Take-off	1524 kg	
	Max Landing	1448 kg	
Hopper Limits	544 kg at +1088 mm		
	Centre of Gravity	+1081 mm at zero litres	
		+947 mm at 800 litres or above	
	Variation is linear between zero and 800 litres.		
No. of Seats	Two	Pilot	arm +2134 mm
		Second occupant	+2163 mm
Fuel Capacity	Main wing tanks	two (one tank in each wing)	
	Total each tank	105 litres	at +1303 mm
	Useable each tank	100 litres	at +1300 mm
	Unusable each tank	5 litres	at +1376 mm
	Collector tank	9 litres	at +1588 mm
	Total collector 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 for take-off and landing		15 knots
Control Surface Deflections	Elevator trailing edge	Up	27.0° ± 1.0°
		Down	20.0° ± 1.0°
	- measured between the mid-section line of the elevator and the mid-section line of the horizontal stabiliser		
	Aileron trailing edge	Up	24.0° ± 1.0°
		Down	24.0° ± 1.0°
	- measured between the under-surface of the aileron and the rear under-surface of the wing main plane		
	Rudder trailing edge	L & R	22.0° ± 1.0°
	Wing flaps	Retracted	0° ± 1.0°
		Take-off	15.0° ± 1.0°
		Landing	38.0° ± 1.0°
	All measurements refer to hinge line rotation.		
Serial numbers eligible	GA200C-9723 and subsequent		
Type Design Data	(i)	(a) For serial numbers 200C-9723 to 200C-9827 (see Note 2)	
		- Engineering Release GA200-970031 Issue 1, or	
	(b)	For serial numbers 200C-9828 and subsequent	
		- Engineering Release GA200-970031 Issue 2	

and

- (ii) (a) For serial numbers 200C-9723 to 200C-9827 (see Note 2)
 - Master Drawing GA200-010301 Issue 1 *General Assembly GA200C Aircraft*, or
 - (b) For serial numbers 200C-9828 and subsequent
 - Master Drawing GA200-010301 Issue 2 *General Assembly GA200 Aircraft*,
- and
- (iii) (a) For serial numbers 200C-9723 to 200C-9827 (see Note 2)
 - *Pilot's Operating Handbook and Approved Flight Manual* report B01-01-31 Amendment 0 (initial issue), or
 - (b) For serial numbers 200C-9828 and subsequent, and serial numbers 200C-9723 to 200C-9827 incorporating engineering release GA200-950310 (see Note 2)
 - *Pilot's Operating Handbook and Approved Flight Manual* report B01-01-36 Amendment 0 (initial issue),
- and
- (iv) Service Manual document B01-00-31, Chapter 4 *Airworthiness Limitations*, dated 26 September 2011.
- (See Note 4)

DATA PERTINENT TO ALL MODELS

Certification Basis	1. Civil Aviation Order (CAO) 101.16 Issue 2 including Amendments 27, 46 and 52, and 2. CAO 101.17 Issue 3, and 3. CAO 101.22 Issue 4 including Amendment 72 and Federal Aviation Regulations (FAR) Part 23 at Amendment 36. Compliance with FAR 23.562 is by means of equivalent safety determinations (a) letter F89/443 dated Feb. 14, 1994 (refers to the configuration of agricultural aircraft), and (b) letter F93/1462 dated Feb. 25, 1997 (refers to AC23.15).
Production Basis	Serial numbers GA200/GA200C - 9101 to 0144 Certificate of Approval Number 1235, dated 31 August 1990. Serial numbers GA200/GA200C - 0345 and subsequent Production Certificate No. 053049, dated 15 August 2003.
Operational Basis	In accordance with CASA letter 97/13817-02 dated 23rd November 1998, operations in the restricted category may be conducted at weights in excess of the certificated maximum weights. The following placard must be installed on the instrument panel in full view of the pilot: (a) GA200

MAXIMUM OPERATING SPEED FOR OPERATIONS ABOVE 1315 kg – 110 KIAS
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(b) GA200C

MAXIMUM OPERATING SPEED FOR OPERATIONS ABOVE 1524 kg – 110 KIAS
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The following models have demonstrated satisfactory flight handling characteristics under the following conditions of weight, height above MSL, temperature and speed;

- (a) GA200 at 1722kg, 1000 feet, 28° C
Stall speed 63 KIAS, maximum speed 110 KIAS.
- (b) GA200C at 1996kg, 1000 feet, 28° C
Stall speed 66 KIAS, maximum speed 110 KIAS.

Aircraft performance, strength and durability have not been established for operational weights in excess of the maximum certificated weights.

From 1st October 1998, CASR 1998 Part 21 approved restricted category special purpose operations are:

- (i) CASR 21.025 (2)(a) Agricultural operations, and
- (ii) CASR 21.025 (2)(c) Fire fighting.

(See Note 3).

Equipment

- 1. The approved aircraft flight manual is required equipment.
- 2. Other equipment as required to meet applicable operational regulations must be installed prior to issue of a Certificate of Airworthiness.

Required Placards.

- (i) In full view of both occupants:

AN APPROVED CRASH HELMET MUST BE WORN WHEN OPERATING THIS AIRCRAFT

- (ii) Other placards as required by the applicable Pilot's Operating Handbook and Approved Flight Manual.

Notes

- 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 in the serial number range 200C-9723 to 200C-9827 are initially subject to lower operating limitations as specified in Flight Manual B01-01-

31. These lower limitations are removed by incorporation of Gippsland Aeronautics approved engineering release GA200-950310. Flight manual B01-01-36, and placards listed therein, are then applicable.

3. Pre 1st October 1998, Certificates of airworthiness were issued in the Agricultural category. With the introduction of CASR 1998 Part 21, certificates of airworthiness can only be issued in the Normal and/or Restricted categories. See CASR 1998 21.175. Certificates of airworthiness issued prior to 1st October 1998 in the Agricultural Category remain in force. See CAR 1988, sub-regulation 314(1).
4. Unless otherwise stated, later CASA approved revisions are accepted as meeting type data requirements.
5. Issue of Type Certificate VA519 cancels and replaces Certificate of Type Approval 83-6. Aircraft certificated under CTA 83-6 are taken to be certificated under TC VA519. Certificates of Airworthiness issued on the basis of CTA 83-6 are now taken to be based on Type Certificate VA519.

Revision History

Revisions 1 to 8 were issued in support of Certificate of Type Approval No. 83-6.

Revision 6 was issued 3 April 1998 to add model GA200C.

Revision 7 was issued 8 December 1998 to sunset Agricultural category, and introduce Restricted category.

Revision 8 was issued 16 November 2001 to add an alternate modified engine for the GA200C.

Revision 9 was issued 8 August 2006 in support of the issue of Part 21 Type Certificate VA519, to change the certificate holder, and to update the production basis. The basis of certification was not changed, and data previously submitted to support issue of CTA 83-6 has been accepted as the basis for certification for this type certificate.

Revision 10 was issued 25 November 2010 to update the Type Certificate holder's address, fix minor editorial errors, remove 310 BHP reference on GA200C propeller and correct engine designations.

Revision 11 was issued 28 September 2011 to update the Airworthiness Limitations following a Fatigue Life extension of certain GA200C aircraft incorporating the modifications contained in SB-GA200-2011-06.