

Australian Government

Civil Aviation SafetyAuthority

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



Eugene Paul Holzapfel Delegate of the Authority



Australian Government

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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 Airpo Airfield Rd Traralgon, VIC, Austra	ort lia	
I <u>Model GA200</u>	Approved in normal and restricted categories 1 st March 1991 (See Note 3)		
Engine	Textron Lycoming O-5	40-A1D5 or O-540-H2A5	
Engine Limits	2575 RPM and 250 BH	IP for all operations.	
Fuel	100LL or 100/130 avia	tion gasoline	
Propeller	McCauley 1A200/FA8 Diameter Pitch: Maximum static	452 metal, fixed pitch Not over 2134 mm Not under 2090 mm 1320 mm at 0.75 radius RPM (full throttle): Not over 2450 Not under 2350	
Airspeed Limits	Never exceed V_{ne} Max structural cruise V Manoeuvring V_a Max flaps extended V_e	138 KIAS 7 _{no} 111 KIAS 107 KIAS 97 KIAS	
Centre of Gravity Limits	Forward Limit Variation is linear betw Aft Limit	+965 mm aft of datum at 862 kg or less +991 mm aft of datum at 1315 kg yeen 862 kg and 1315 kg +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 T Lateral L	Cop longeron Level across	ns horizonta top longere	al at the fu	selage cockpit fuselage cockpit
Certification Weights	Max Take-off Max Landing	1315 1315	5 kg 5 kg		
Hopper Limits	544 kg at +1088	3 mm			
No. of Seats	Two	Pilot Second oc	cupant	arm -	+2134 mm +2163 mm
Fuel Capacity	Main wing tank Total each Useable ea Unusable Collector tank Total colle	s 1 tank ach tank each tank ector tank ca	two (one 105 lit: 100 lit: 5 lit: 12 lit: apacity is d	tank in ea res at - res at - res at - res at esignated	ch wing) +1303 mm +1300 mm +1376 mm + 302 mm unusable fuel.
Oil Capacity	Total Unusable		11.4 litt 2.6 litt	res at res at	-540 mm -540 mm
Crosswind Component	Maximum for ta	ake-off and l	anding	1	5 knots
Control Surface Deflections	Elevator trailing edge Up $27.0^{\circ} \pm 1.0^{\circ}$ Down $20.0^{\circ} \pm 1.0^{\circ}$ - measured between the mid-section line of the elevator and the mid-section line of the horizontal stabiliser				
	Aileron trailing edge]]]	Up Down urface of th	$24.0^{\circ} \pm 1.0^{\circ}$ $24.0^{\circ} \pm 1.0^{\circ}$ he aileron and the rear
	under-surface of the wing main plane				
	Rudder trailing edge]	L & R	$22.0^{\circ}\pm1.0^{\circ}$
	Wing flaps] ,	Retracted Take-off Landing	$0^{\circ} \pm 1.0^{\circ}$ $15.0^{\circ} \pm 1.0^{\circ}$ $38.0^{\circ} \pm 1.0^{\circ}$
Serial numbers eligible	All measuremer GA200-9101 an	nts refer to h nd subsequer	inge line ro nt	otation.	
Type Design Data	(i) (a) For ser - En (b) For ser	ial numbers gineering R ial numbers	200-9101 elease GA2 200-9417	to 200-941 200-97000 and subsec	16 01 Issue 1, or quent

	- 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,
und	 (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 3 rd 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 KIASMax structural cruise V_{no} 115 KIASManoeuvring V_a 115 KIASMax 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
Datum	Fuselage firewall frame jacking points at fuselage station 0 (Stated arms are +ve aft; and -ve forward)
Levelling	LongitudinalTop longerons horizontal at the fuselage cockpitLateralLevel across top longerons at the fuselage cockpit.

Certification Weights		Max Take-off Max Landing	1524 1448	4 kg 3 kg	
Hopper Limits		544 kg at +108 Centre of Variation	8 mm Gravity is linear betv	+1081 mm at ze +947 mm at 80 ween zero and 80	ero litres 0 litres or above 00 litres.
No. of Seats		Two	Pilot Second oc	arm cupant	+2134 mm +2163 mm
Fuel Capacity		Main wing tank Total each Useable e Unusable Collector tank Total coll	ts h tank each tank each tank lector tank ca	two (one tank in 105 litres 100 litres 5 litres 9 litres spacity is designa	n each wing) at +1303 mm at +1300 mm at +1376 mm at +1588 mm ted unusable fuel.
Oil Capacity		Total Unusable		11.4 litres 2.6 litres	at -540 mm at -540 mm
Crosswind Component		Maximum for t	ake-off and l	anding	15 knots
Control Surface Deflections	Elevator trailing edge Up Down - measured between the mid-section line of mid-section line of the horizontal stabiliser		$27.0^{\circ} \pm 1.0^{\circ}$ $20.0^{\circ} \pm 1.0^{\circ}$ he of the elevator and the liser		
		Aileron trailing - measure under-sur	edge d between th face of the w	Up Down he under-surface ving main plane	$\begin{array}{c} 24.0^\circ \pm 1.0^\circ \\ 24.0^\circ \pm 1.0^\circ \end{array}$ of the aileron and the rear
		Rudder trailing	edge	L & R	$22.0^\circ\pm1.0^\circ$
		Wing flaps		Retrac Take-c	ted $0^{\circ} \pm 1.0^{\circ}$ off $15.0^{\circ} \pm 1.0^{\circ}$
		All measureme	nts refer to hi	inge line rotation	$19 58.0 \pm 1.0$
Serial numbers eligible		GA200C-9723	and subseque	ent	
Type Design Data	(i)	 (a) For serial r - Enginee (b) For serial r - Enginee 	numbers 2000 oring Release numbers 2000 oring Release	C-9723 to 200C-9 GA200-970031 C-9828 and subse GA200-970031	9827 (see Note 2) Issue 1, or equent Issue 2

- (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
	 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 23 rd 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

(b) GA200C

Notes

MAXIMUM OPERATING SPEED FOR OPERATIONS ABOVE 1524 kg – 110 KIAS

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 Other placards as required by the applicable Pilot's Operating (ii) Handbook and Approved Flight Manual. 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 B01-0131. 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.