

**MINISTÉRIO DA AERONÁUTICA
DEPARTAMENTO DE PESQUISAS E DESENVOLVIMENTO
CENTRO TÉCNICO AEROESPACIAL**

TYPE CERTIFICATE DATA SHEET Nº EA-1999T11

Type Certificate Holder:

GIPPSLAND AERONAUTICS PTY. LTD.

Latrobe Valley Airfield
PO Box 881
Morwell
Victoria 3840
AUSTRALIA

EA-1999T11
Sheet 01

GIPPSLAND
GA200
GA200C

September 1999

This data sheet, which is part of Type Certificate No. 1999T11, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Brazilian Aeronautical Regulations.

I - Model GA200 (Restricted Category), approved 20 September 1999.

ENGINE 1 AVCO Lycoming Model O-540-A1D5 or O-540-H2A5

ENGINE LIMITS 2 575 rpm and 250 hp for all operations

PROPELLER McCauley 1A200/FA8452
Two blades, metal, fixed pitch
Diameter: Not over 2 134 mm (84.00 in)
Not under 2 090 mm (82.28 in)
Pitch: 52.00 in (1 320 mm) at 0.75 radius
Max. static rpm (full throttle): Not over 2 450
Not under 2 350

FUEL CAPACITY Main wing tanks: 2 (1 tank each wing)
- Total each tank: 105 liters at +1 303mm
- Useable each tank: 100 liters at +1 300 mm
- Unusable each tank: 5 liters at +1 376 mm
Header tank (unusable): 12 liters at +302 mm
Total fuel: 222 liters
Total usable fuel: 200 liters

S/N'S ELIGIBLE 9101 and up

II - Model GA200C (Restricted Category), approved 20 September 1999.

ENGINE 1 AVCO Lycoming Model IO-540-K1A5

ENGINE LIMITS 2 700 rpm and 300 hp

PROPELLER

Hartzell HC-C2YR-1BF/F8475R
 Two blades, metal, constant speed.
 Diameter: Not over 2 134 mm (84.000 in)
 Not under 1 981 mm (78.00 in)
 Max. continuous and takeoff rpm: 2 700

FUEL CAPACITY

Main wing tanks: 2 (1 tank each wing)
 - Total each tank: 105 liters at +1 303mm
 - Useable each tank 100 liters at +1 300 mm
 - Unusable each tank 5 liters at +1 376 mm
 Collector tank (unusable): 9 liters at +1 588 mm
 Total fuel: 219 liters
 Total usable: 200 liters

S/N'S ELIGIBLE

C9723 and up

DATA PERTINENT TO ALL MODELS:**FUEL**

100LL or 100/130 aviation gasoline.

OIL

MIL-L-6082 or MIL-L-22851 (See Brazilian AFM).

AIRSPEED LIMITS (IAS)

Never exceed (V_{NE})	138 kt
Structural cruising (V_{NO})	111 kt
Maneuvering (V_A) - sea level	107 kt
Flaps extended (V_{FE})	97 kt

C. G. RANGE

Forward limit: +965 mm aft of datum at 862 kg or less
 +991 mm aft of datum at 1 315 kg
 Variations linear between 862 kg and 1 315 kg.
 Aft limit: +1 118 mm aft of datum at all weights.

EMPTY WEIGHT C. G. RANGE

None

DATUM

Fuselage firewall frame jacking points at fuselage station 0.

LEVELING MEANS

Longitudinal: Top longerons at the fuselage cockpit horizontal.
 Lateral: Level across top longerons at the fuselage cockpit.

MAXIMUM WEIGHT

Takeoff	1 315 kg (2 900 lbs)
Landing	1 315 kg (2 900 lbs)

HOPPER CAPACITY

544 kg at +1 088 mm

NUMBER OF SEATS

Two

Pilot arm: +2 134 mm (84.00 in)

Second occupant arm: +2 163 mm (85.20 in)

OIL CAPACITY

Total: 11.4 liters at -540 mm

Unusable: 2.6 liters at -540 mm

**CONTROL SURFACE
MOVEMENTS:**

Elevator Up 27° +1°, -1° Down 20° +1°, -1°

Rudder Right 22° +1°, -1° Left 22° +1°, -1°

Aileron Up 24° ± 1° Down 24° ± 1°

Wing flaps Retract 0° ± 1°

Takeoff 15° ± 1°

Landing 38° ± 1°

All measurements refer to hinge line rotation.

IMPORT ELIGIBILITY

A Brazilian Certificate of Airworthiness may be issued on the basis of on an CASA - Australia Export Certificate on Airworthiness (or a third country Export Certificate on Airworthiness, in case of used aircraft imported from such country), including the following statement:

“The aircraft covered by this certificate has been inspected, tested and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate No. 1999T11 and in condition of safe operation”.

The CTA Report H.10-1590-01, dated 20 September 1999 or further revisions, contains the Brazilian requirements for the acceptance of these airplanes. (See note 4)

CERTIFICATION BASIS

Brazilian Requirements for Aeronautical Certification (RBHA) 23, which endorses the FAR Part 23 effective 01 February 1965, as amended by 23-1 through 23-36; for the special purpose of RBHA 21.25 (a), 21.25 (b) and 21.25(b)(2) (Restrict Category Aircraft):

1. Agricultural operations under RBHA 21.25 (b) (1).

Notes: a. In accordance with RBHA 36.1(a)(2), as compliance with the noise requirements was not shown, the aircraft are only eligible for agricultural operations excepted by RBHA 36.1 (a)(2) and defined under RBHA 137.3.

b. In accordance with CAM 8, Appendix B, dated March 1954, operations with increased weight are permitted within the limits specified in the figure 7-1.

2. Forest and wildlife conservation under RBHA 21.25(b)(2).

Note: In accordance with RBHA 36.1(a)(2), as compliance with the noise requirements was not shown, the aircraft are only eligible for dispensing fire fighting materials excepted by RBHA 36.1(a)(2) and defined under RBHA 137.3.

**CERTIFICATION BASIS
(Cont.)**

Equivalent Level of Safety Finding: Emergency Landing Dynamic Conditions (RBHA/FAR 23.562), in accordance with FAA AC 21.15, dated 02 January 1997. (Ref. CASA letter F93/1462, dated 25 February 1997).

REQUIRED EQUIPMENT

The basic required equipment, as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane for certification. In addition, the Brazilian Airplane Flight Manual, which the original issue was CASA approved on 30 June 1989, must be on board of the aircraft at all time. (Ref. RBHA 137.33).

NOTES:

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

NOTE 2: All required placards in the CASA approved (for the CTA) aircraft flight manual must be installed in the appropriate locations.

The following placard must be installed in plain view of the pilot:

“Restricted Category airplane for agricultural use and dispensing fire retardant only”

The following placard must be installed in plain view of the occupants:

- a. “All occupants must wear an approved crash helmet when operating this aircraft”
- b. “The use of the second seat is restricted by requirements in RBHA 91.313”

Others placards as per approved pilots operating handbook and aircraft manual, report n° B01-01-01 for GA200 model and report n° B01-01-36 for GA200C model.

NOTE 3: Service life structural components are listed in the Airworthiness Limitations Section, Chapter 4, of the GA200 Service Manual, Report B01-00-21 dated 31 July 1997 for GA200 model, of the GA200C Service Manual, Report B01-00-31 dated 02 March 1988. The Airworthiness Limitations Section was approved by CASA. Revisions to this section must be approved by CASA on behalf of the CTA.

NOTE 4: The differences of the Brazilian airplanes in relation to the same Australian CASA type design are summarized below:

1. The Brazilian Aircraft Flight Manual, approved by CASA on behalf the CTA for the following models:
 - GA200, AFM Report n° B01-01-01, dated 10 September 1999.
 - GA200C, AFM Report n° B01-01-36, dated 10 September 1999.
 2. The Markings and Placards translated to Portuguese is presented in annex III of the Report H.10-1590-01, dated 20 September 1999.
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NOTE 5: When operating in the agricultural category, operators may utilize higher weights within the limits of figure 7-1 of CAM 8. With respect to this action the following aircraft have demonstrated satisfactory operation in the agricultural category under the following conditions:

- a. GA200 at 1 722 kg, 1000 ft, 28°Celsius
Stall speed 61 kias, maximum speed 110 kias
- b. GA200C at 1 722 kg (provisional), 1000 ft, 28°C.
Stall speed 61 kias, maximum speed 110 kias.

All models: On the instrument panel in full view of the pilot:

MAXIMUM OPERATING SPEED FOR OPERATIONS ABOVE 1315 kg – 110 KIAS.

JOSÉ LUIZ R. BELDERRAIN – Ten.-Cel.-Eng.
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