DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A00071CE
Revision 1
Airvan10 Pty Ltd
GA10
July 7, 2021

TYPE CERTIFICATE DATA SHEET A00071CE

This data sheet, which is part of the Type Certificate No. A00071CE, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder — Airvan10 Pty Ltd
(ACN 609 777 273)
C/O GippsAero Pty Ltd.
Latrobe Regional Airport, Traralgon, Victoria 3844, Australia
Mail Correspondence: P.O. Box 881 Morwell, Victoria 3840, Australia

I. GA10 (Normal Category) Approved May 19, 2017

Engine — One Rolls-Royce Corporation 250-B17F/2
Type Certificate: E10CE

Primary Fuels — JET A or JET A-1 conforming to ASTM D1655-03 or later,

Alternate Fuels — Jet B conforming to ASTM D 6615 or CAN/CGSB-3.22
JP-5 conforming to MIL-DTL-5624
JP-8 conforming to MIL-DTL-83133
GB 6537 (Peoples Republic of China), Jet Fuel Grade No. 3

For ambient temperature below +4°C (+40°F) fuels must contain 0.10% up to a maximum of 0.15% anti icing additive (MIL-I-27686 or MIL-DTL-85470) per engine manufacturers instructions. JP-5 and JP-8 fuels contain anti-icing additives. Do not use additional additives with these fuels.

Engine Limits

Maximum Takeoff	2030 rpm (450 hp)
Maximum Continuous	2030 rpm (380 hp)
Maximum During Transient	2030 rpm to 2233 rpm (15 sec. max. above 2132 rpm)

NOTE: Power greater than 35 PSI (165 HP) is not to be selected with the aircraft stationary. Also refer to the GA10 *Airplane Maintenance Manual* for further information.

NOTE: Operation of the engine in the 75-88% (24,967–29,295 RPM N2, 1522–1786 RPM Np) speed range must be without dwell and of a transient nature (less than 60 seconds) at power levels above 85 HP (20 psi torque).

See latest approved revision of the GA10 Pilot's Operating Handbook and Approved Flight Manual and FAA Engine TC Data Sheet E10CE for additional details and limitations.

Propeller and Propeller Limits — One Hartzell HC-D3F-7H/D9511F-11
Three blade, constant speed, feathering, reversing
Type Certificate: P18NE
Not over 84.0 inches (2134 mm) diameter
Not under 82.4 inches (2093 mm) diameter
No further reduction permitted
Pitch settings at 30 in. (762 mm) sta.:

Low Pitch	Refer GA10 Airplane Maintenance Manual
High Pitch	86° ± 0.5°
Reverse	-10° ± 0.5°

Airspeed Limits (IAS)	Maximum operating	V_{MO} 157 KCAS	(156 KIAS)
	Max operating manouvre	V_O 98 KCAS	(97 KIAS)
	Maneuver	V_A 133 KCAS	(132 KIAS)
	Max flaps extended	V_{FE} 108 KCAS	(107 KIAS)

Center of Gravity (C.G.) Range

Forward Limit:
+65.0 aft of datum at 3,000 lbs or less
+76.5 aft of datum at 4,750 lbs

Aft Limit:
+82.0 aft of datum at 2,500 lbs
+83.0 aft of datum at 4,200 lbs
+83.0 aft of datum at 4,750 lbs

Straight-line variation between points.

For CG aft of +81.7, total main wing fuel tank quantity is limited to 92.5 gallons (350 litres).

Empty Weight CG 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 left hand side of fuselage.
Lateral: Level across the top surface of the seat attach fittings on the cabin floor.

Maximum Weight	Taxi and Ramp	4,775 lbs (2,166 kg)
	Take-off	4,750 lbs (2,155 kg)
	Landing	4,515 lbs (2,048 kg)

Minimum Crew: One pilot in the LH crew station.

Number of seats: Up to Ten (10) (Includes pilot(s) and crew)
2 adjustable at +33.4 to 41.2 (+848 mm to 1047 mm) aft of datum
2 fixed at +71.0 inches (+1803 mm) aft of datum
2 fixed at +101.5 inches (+2578 mm) aft of datum
2 fixed at +132.0 inches (+3353 mm) aft of datum
2 fixed at +162.5 inches (+4128 mm) aft of datum

Maximum Baggage: Baggage Shelf 250 lb (113 kg) at +183.0 inches (+4648 mm) aft of datum

Fuel Capacity	Main wing tanks	2 (1 tank each wing)
	Total each tank	76.6 US Gallons (290 litres) at +85.3 inches (+2167 mm)
	Useable each tank	75.6 US Gallons (286 litres) at +85.24inches (+2165 mm)
	Unusable each tank	1.1 US Gallons (4 litres) at +89.8 inches (+2280 mm)
	Collector tank	Total capacity 2.4 US Gallons (9 litres) is unusable fuel at +46.6 inches (+1184 mm)

See Note 1 for data on weight and balance

Oil Capacity	System Total	10.4 quarts (9.8 litres) at –19.6 inches (-499 mm)
	Unusable	1.32 US Quarts (1.25 litres) at –12.6 inches (-320 mm)

See Note 1 for data on weight and balance. Oil tank located at -12.6 inches (-320 mm).

See Rolls-Royce B17F "Operation and Maintenance Manual", publication ref CSP21008, for approved oils.

Maximum Operating Altitude

20,000 ft with an approved oxygen system installed. Refer FAA regulations for altitude limit without oxygen.

Control Surface Movements

Aileron	Up	17.0° ± 0.5°
	Down	16.0° ± 0.5°
Elevator	Up	17.5° ± 0.5° (1)
	Down	19.0° ± 0.5° (1)
Rudder	L & R	21.0° ± 0.5°
Hor. Stabiliser	Up	3.0° ± 0.5° (2)
	Down	5.0° ± 0.5° (2)
Wing flaps	Retracted	0.0° ± 1.0°
	Take-off	14.0° ± 1.0°
	Landing	38.0° ± 1.0°

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

Serial Numbers Eligible

GA10-TP450-16-101 and subsequent.

Import Requirements

A United States airworthiness certificate may be issued on the basis of an Australian Export Certificate of Airworthiness signed by a representative 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 Master Drawing GA10-010001 and Engineering Release GA10-970001 at latest revision, approved under U.S. Type Certificate No. A00071CE and to be in a condition for safe operation."

The U.S. airworthiness certification basis for this aircraft type certificated under FAR § 21.29 and exported by the country of manufacture is FAR § 21.183 (c).

Per 21.50(b), Instructions for Continued Airworthiness (ICA) complying with FAR 23.1529, must be furnished before delivery of the first airplane or issuance of a US standard certificate of airworthiness, whichever occurs later.

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, *Airworthiness Certification of Aircraft*, for requirements for issuance of an *airworthiness certificate* for imported aircraft

Certification Basis

1) 14 CFR part 21.29, part 21.183(c) and 14 CFR Part 23, effective December 18, 1964, with amendments 1 through amendment 62 "Airworthiness Standards for Normal Category Airplanes":

2) 14 CFR Part 34, effective September 10, 1990 including Amendments 34-1 through Amendment 34-5A "Fuel Venting and Exhaust Emission Requirements For Turbine Engine Powered Airplanes"

3) 14 CFR Part 36, effective December 1, 1969 with Amendments 36-1 through Amendment 36-30 “Noise Standards: Aircraft Type and Airworthiness Certification”

4) Equivalent Safety Findings (ELOS) according to the provisions of 14 CFR part 21.21(b)(1) for the following subjects:

TC00769CE-A-G-9, dated June 14, 2016: Amendment 23-62 Corrections	§23.45, §23.51, §23.63, §23.67, §23.73, §23.77, §23.161, §23.181, §23.221, §23.251, §23.253, §23.571, §23.785, §23.831, §23.1195, §23.1197, §23.1199, §23.1201, §23.1527, §23.1545, §23.1583

5) No Exemptions

6) No Special Conditions

7) The airplane is not approved for ditching

8) The airplane is not approved for flight into known or forecasted icing.

9) Other operational restrictions - Maximum Operating OAT , 50°C ; Minimum Operating OAT -26°C , Refer to the GA10 “Pilot's Operating Handbook and Approved Flight Manual” for temperature related performance limits. (See Note 7)

CASA issued CASA Type Certificate No. VA522 on May 19, 2017

Date of application for original FAA Type Certificate: October 15, 2015

TC A00071CE issued on May 19, 2017.

Production Basis

None.

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 approved Pilot's Operating Handbook and Approved Flight Manual document #D01-01-01 dated March 31, 2017, or later approved version, must be carried. (See Note 2)

Service Information

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

- Pilot's Operating Handbook and Approved Flight Manual, and
- Airworthiness Limitations Section of the Maintenance Manual.

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

• The documents change the limitations, performance, or procedures of the FAA approved manuals; or

•The documents make an acoustical or emissions changes to this product’s U.S. type certificate as defined in 14 CFR § 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to CASA to approve on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

Available documents for the GA10 model:

FAA approved Pilot's Operating Handbook and Approved Flight Manual document #D01-01-01 dated March 31, 2017, or later approved version, must be carried. (See Note 2)

Instructions for Continued Airworthiness (ICA) are contained in the Airplane Maintenance Manual (AMM) document # D01-00-01 dated April 7, 2017 or later accepted versions. Chapter 4 Airworthiness Limitations are dated April 7, 2017 (See Note 3 and 4)

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 [21.7 lbs. (9.83 kg) at -19.6 inches (-499 mm)] and unusable fuel [14.1 lbs. (6.4 kg) in main tanks at +89.8 inches (+2280 mm) and 15.9 lbs. (7.2 kg) in collector tank at +46.6 inches (+1184mm)].

NOTE 2 All required placards are contained in Chapter 2 of the Pilot's Operating Handbook and Approved Flight Manual, document # D01-01-01 and must be installed in the appropriate locations. The Pilot's Operating Handbook and Approved Flight Manual document #D01-01-01 dated March 31, 2017, was approved by CASA and the FAA. Revisions to this report may be approved by CASA on behalf of the FAA, unless they are changes to the limitation section. These changes require FAA approval for the US version.

NOTE 3 Mandatory retirement lives, required inspections, and inspection intervals of components are listed in the Airworthiness Limitations Section, Chapter 4, of the Airplane Maintenance Manual, document # D01-00-01, dated April 7, 2017. The Airworthiness Limitations Section was approved by CASA and the FAA. Revisions to this section must be approved by CASA and the FAA.

NOTE 4 The ICAs are contained in the Airplane Maintenance Manual, document # D01-00-01 dated April 7, 2017 or later accepted revisions.

NOTE 5 Service and operational documents for the Model GA10 will state the manufacturer as GippsAero Pty Ltd.

NOTE 6 The Model GA10 is referred to in manufacturers marketing literature as the "AIRVAN10". This name is strictly a marketing designation and is not part of the official model designation.

NOTE 7 Flight in cloud or visible moisture is prohibited when OAT is -18°C or below. This limit has been imposed to ensure the absence of engine inlet icing.

END