

TYPE-CERTIFICATE DATA SHEET

EASA.BA.523

CAMERON TGB SERIES Manned Tethered Gas Balloons

Type Certificate Holder: CAMERON BALLOONS Ltd

St Johns Street Bedminster Bristol BS3 4NH UNITED KINGDOM

For Variants: TGB-1150

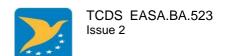
Issue 2, 21 July 2020

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SECTION 1: GENERAL

I. General

1. Data Sheet No: EASA.BA.523 Issue Date: 01 July 2020

2. Type / Variant or Model

(a) Type: Cameron TGB Series

(b) Variant or Model: TGB-1150

(c) Serial: 12043 & 12142

3. Airworthiness Category: Normal

4. Type Certificate Holder: CAMERON BALLOONS LTD.

St Johns Street Bedminster Bristol BS3 4NH UNITED KINGDOM

5. Manufacturer: CAMERON BALLOONS LTD.

St Johns Street Bedminster Bristol BS3 4NH UNITED KINGDOM

6. EASA Certification date: 10 July 2019

II. Certification Basis

1.

Reference date for determining

the applicable requirements: 10 Jan 2019

2. Airworthiness Requirements: EASA CS 31TGB Initial Issue

3. Special Conditions: SC-CS-31GB.61 Electrostatic discharge

SC-ELA.2015-1 Lithium Batteries

4. Reversion and Exemptions: None5. Equivalent Safety Findings: None

III. Technical Characteristics and Operational Limitations

1. Type Design Definition: CB1783 Issue C or subsequent approved issue.

2. Description: Manned tethered gas balloon for theatrical display and

transport of passengers.

2.1 Envelope:

Spherical envelope of approximately 1204 m³ total volume, constructed from coated fabric with load transfer by net and lines. An air ballonet of 20% volume is installed in the lower part of the envelope. Pressure is controlled by automatic air fans and automatically and manually controlled over pressure

valves.

2.2 Gondola:

The gondola is a conventional basket of woven construction

with a plywood floor; size 107 x 107 cm

3. Equipment: Helium pressure gauge.

Helium temperature gauge Air ballonet pressure gauge

Anemometer with ambient air temperature reading.

Load cell (winch-mounted) Auto/manual helium valve Auto/manual Ballonet Air valve

4. Ground Facilities: Electrically driven cable winch and controls from Ritter

Maschinen (Fabriknummer: 19.PZWE.605). The usable cable

length is 50m.

Display of balloon control system parameters via telemetry.

Anemometer display.

3 positioning winches manually controlled.

5. Minimum Occupants: None (pilot is ground-based).

6. Maximum Occupants: Three

7. Maximum Mass: 944 kg. Minimum free lift is calculated in Flight Manual

Section 5

8. Maximum Windspeed: 8.3 m/sec (16 knots, 30 km/h) for flight operations,

27.8 m/sec (54 knots, 100 km/h) for mooring,

3.0 m/sec (6 knots, 11 km/h) for inflation

9. Minimum Crew: See Flight Manual Section 2.6

10. Life Limited Parts: See Maintenance Manual.

11. Lifting Gas: Helium.

12. Operational Limitations: Serials listed under I. 2 (c) can only be operated by the

Bregenz Festspiele at the Lage Stage in Bregenz, Austria

(47°30'21.6"N 9°44'16.8"E) until 31. Oct 2021.

IV. Operation and Service Instructions

- 1. Cameron Balloons Tethered Gas Balloon Flight Manual and Supplements Issue 1 Amendment 5 or later approved EASA revision.
- 2. Cameron Balloons Tethered Gas Balloon Maintenance Manual and Supplements Issue 1 Amendment 3 or later approved EASA revision.

V. Notes

Note 1 Repairs and replacement of the tether system require a re-evaluation of the compliance declaration in accordance with 31TGB.53

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