TYPE-CERTIFICATE
DATA SHEET

EASA.BA.523

for
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 31 TGB Initial Issue
3. Special Conditions: SC-CS-31GB.61 Electrostatic discharge
   SC-ELA.2015-1 Lithium Batteries
4. Reversion and Exemptions: None
5. 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.

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### 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.

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### 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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